CHAPTER - 3

DESKTOP PUBLISHING (ADVANCED)

3.1 Introduction to CorelDraw :-

CorelDraw is a vector graphics and designing software. This software is a booming graphics suite, providing many features for users to edit graphics. These features includes contrast adjustment, color balancing, 3D, Transformation, rotation, Graphical Lines, adding more effects for example borders to images, and it is capable of working with multiple layers and multiple pages.

CorelDraw is a tool to create Vector graphics. With the help of this software, you can create logos, V.card, Posters, Brochures, Illustrations and many more. You can also trace Bitmap into vector.

CorelDraw was released on January 16, 1989, Today, the software is still used by many people, with the version, X8, being released on March 15, 2016, and its Latest Version x9, released on April 11, 2017, in the Market. CorelDraw is designed for the Windows operating system.

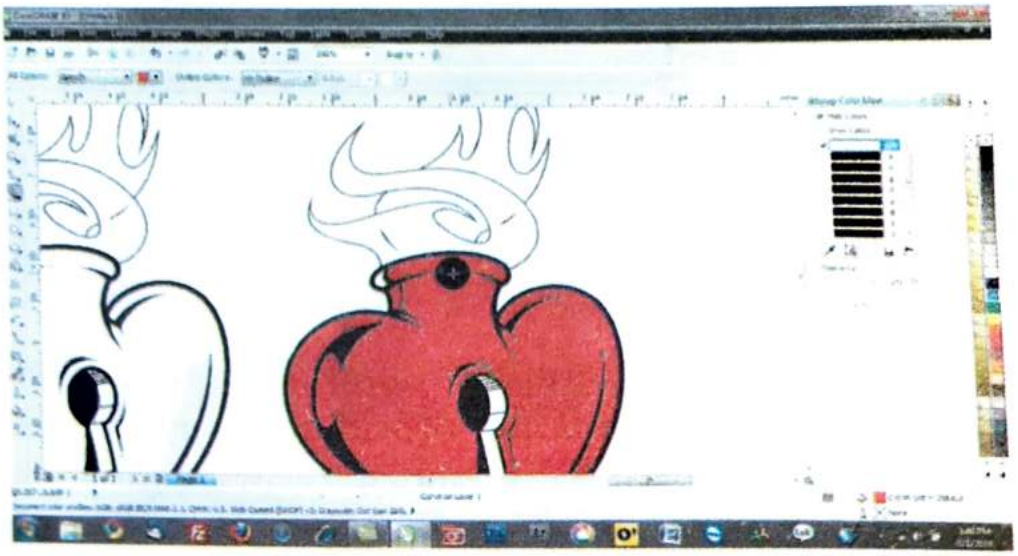
3.2 Basic Graphic Terminology :-

In the computer world, there are a lot of different ways to store an image. These different ways of storing are called file format or image file types. There are many types of image file, just like as .jpg, .gif, .png, etc. However, no matter what file type you use, every picture on a computer can be classified as either a Bitmap or Vector image.

Bitmap Image:-

Bitmap images are made up of tiny dots on the computer screen these dots are called Pixels. Bitmaps are made up of rows and columns of

these pixels that come together to form a picture. Most images found on the web or taken by digital camera are Bitmap images. The resolution of a bitmap images is measured in the number of pixels per inches (PPI).



Bitmap image

Some examples of Bitmap file format :-

Sr.No.	Name	File Extension
1	TIFF (Tagged Images File Format)	.tif., tiff
2	JPEG (Joint Picture Expert Group)	.jpg., jpeg
3	PSD (Photoshop Document)	.psd
4	GIF (Graphics Interchange Format)	.gif
5	PNG (Portable Network Graphics)	.png

Vector Image :-

Vector Images are made up of many geometric objects. Each of these objects can be defined by mathematical statements and has individual properties assigned to it such as color, fill, and outline. As a result, they can be enlarged with no loss of quality. Vector graphics are created using programs like Adobe Illustrator. When Bitmap images are enlarged, the dots become more noticeable. The greatest advantage of

vector images is that they can be scaled up or down to any size without loss of quality.

Some examples of Vector file format :-

Sr.No.	Name	File Extension
1	EPS (Encapsulated PostScript)	.eps
2	AI (Adobe Illustrator)	.ai
3	CDR (CorelDraw)	.cdr
4	SVG (Scalable Vector Graphics)	.svg
5	PDF (Portable Document Format)	.pdf

Difference between Bitmap Images and Vector Images :-

Sr.No.	Bitmap Images	Vector Images
1	Made of pixels.	Made of mathematical calculations that form objects and lines.
2	Represents and edit photo like elements better than vector programs with the use of continuous tones.	Cannot be scaled to any size without losing quality.
3	Resolution dependent. Enlarging a images will result in loss of quality of image.	Resolution independent. Can be printed at any size/ resolution.
4	Cannot be easily converted to vector.	Can be easily converted to Bitmap.

Pixel :-

A pixel is a single square on a computer screen. Depending upon your screen resolution, your screen probably has hundreds or thousands of pixels. For example, the most common screen resolution currently is 1024 X 768, which comes out to 786,432 pixels.

Pixels per Inch (PPI) :-

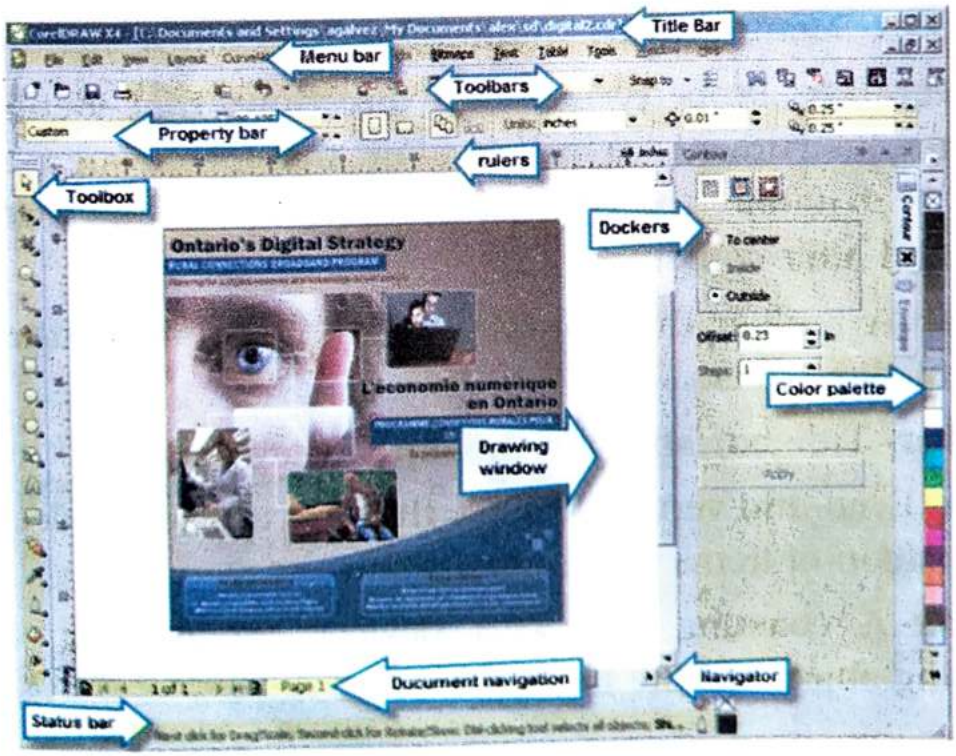
PPI stands for Pixels per Inch, the standard unit of measured for computer graphics (some time known as DPI or Dot per Inch) typically, 150 PPI is sufficient for printing on a laser printer. Professional printing usually requires 300+ PPI.

3.3 Starting CorelDraw :-

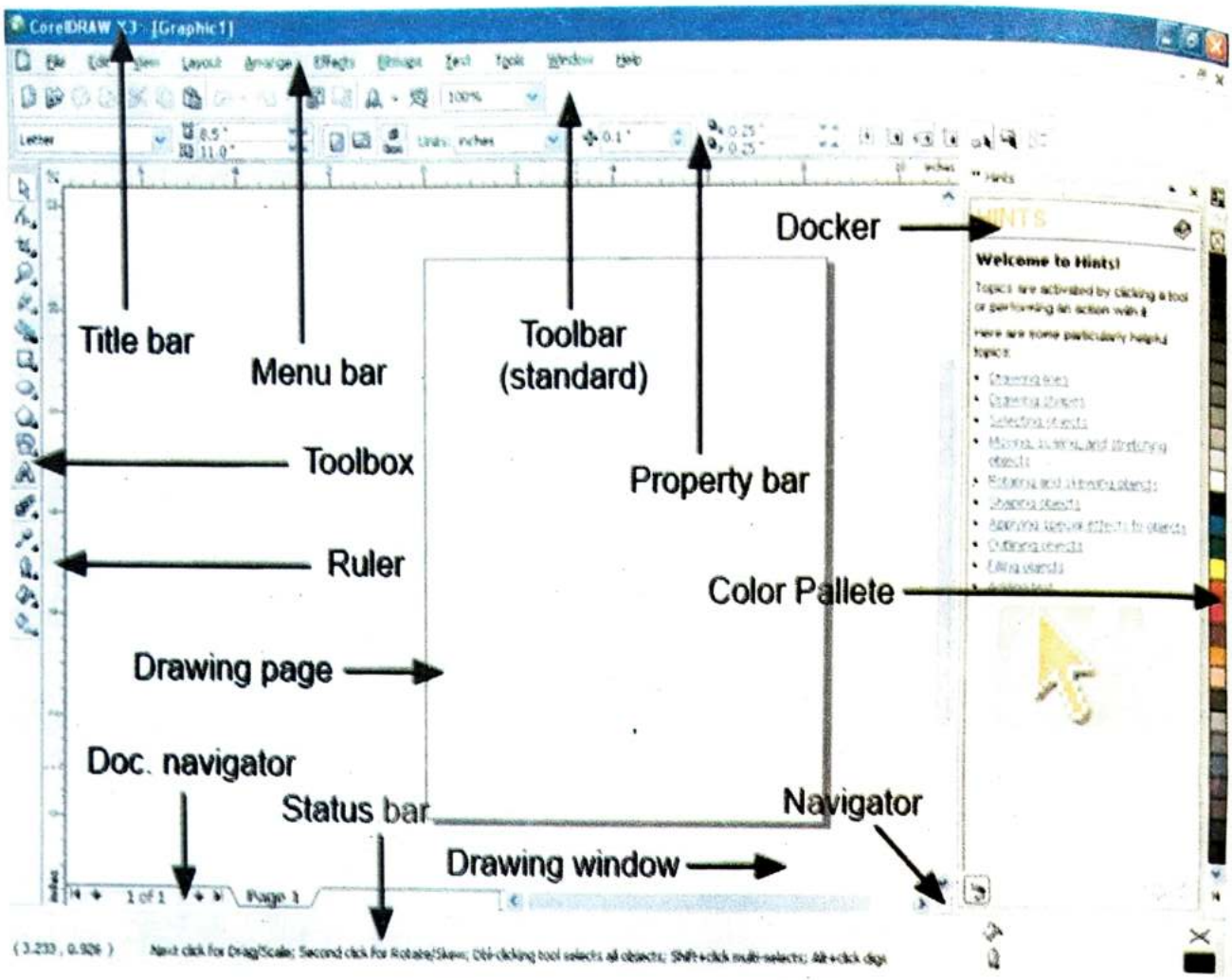
Start by creating a New Document (Ctrl+N) at your preferred work

size (you can change this any time while working), in RGB color mode, and at 300 dpi. These are preferred settings.

Click the Start menu-> highlight Programs-> highlight CorelDraw and then click on CorelDraw as shown :-



3.4 Various Components of CorelDraw window :-



Menu Bar- Menu Bar is containing a draw down menu choices.

Property Bar- Property bar with directions that identify with the dynamic instrument or article. For instance, when the content device is dynamic, the content property bar shows directions that make and alter content.

Toolbar- A Toolbar that contains alternate routes to the menu and different directions.

Title bar- Title bar showing the top of the window.

Rulers- Even and vertical fringes that are utilized to decide the size and position of items in an illustration.

Toolbox- A coasting bar with devices for making, filling, and adjusting objects in the illustration.

Drawing window- The region outside the illustration page circumscribed by the parchment bars and application controls.

Drawing Page- The rectangular territory inside the illustration window. It is the printable zone of your work territory.

Color Palette- A dockable bar that contains shading swatches.

Docker- A window containing accessible directions and settings applicable to a particular instrument or errand.

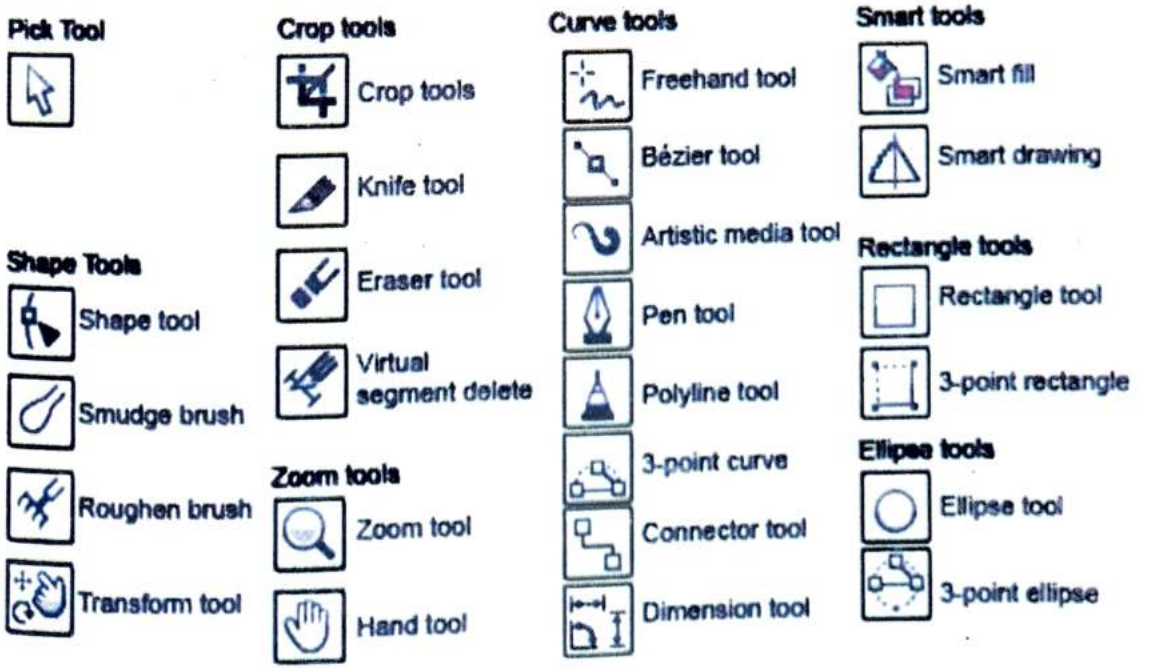
Status bar- A zone at the base of the application window that contains data about article properties, for example, type, measure, shading, fill, and resolution.

Document Navigator- The region at the base left of the application window that contains controls for moving among pages and including pages.

Navigator- The region at the base left of the application windows that contain controls for moving among pages and including pages.

3.5 Tools in CorelDraw :-

There are many tools in the toolbox to draw or design. Toolbox CorelDraw layout you can see in Layout CorelDraw. Icons that appear only a portion of the existing. With the large icon in the toolbox we must be wondering, what is the function of these tools :-



	**Pick tool** - To select, resize, and rotate toward the image object.
	**Shape tool (F10)** - Editing an image object shape or text character by manipulating nodes.
	**Smooth tool** - Smooth object by dragging along its outline.
	**Crop tool** - Remove the areas outside a selection.
	**Eraser tool (X)** - Remove unwanted areas in a drawing.
	**Zoom tool (Z)** - Change the magnification level of the document window.
	**Pan tool (H)** - Drag hidden areas of a drawing into view without changing the zoom level.
	**Freehand tool (F5)** - Draw curves and straight line segments.
	**Pen tool** - Draw curves in segments, and preview each segment as you draw.
	**Smart Drawing tool (Shift+s)** - Convert freehand strokes to basic shapes or smoothed curves.
	**Rectangle tool (F6)** - Draw squares and rectangles by dragging in the drawing window.
	**Ellipse tool (F7)** - Draw circles and ellipses by dragging in the drawing window.
	**Polygon tool (Y)** - Draw polygons by dragging in the drawing window.
	**Star tool** - Draw uniform, outlined stars.

	Basic Shapes tool - Draw triangles, circles, cylinders, hearts and other shapes.
	Arrow Shapes tool - Draw arrows of various shapes and directions.
	Flowchart Shapes tool - Draw flowchart symbols.
	Text tool (F8) - Add and edit paragraph and artistic text.
	Table tool - Draw, select, and edit tables.
	Horizontal or Vertical Dimension tool - Draw horizontal or vertical dimension lines.
	Drop Shadow tool - Apply shadows behind or below objects.
	Color Eyedropper tool - Sample colors, and apply them to objects.

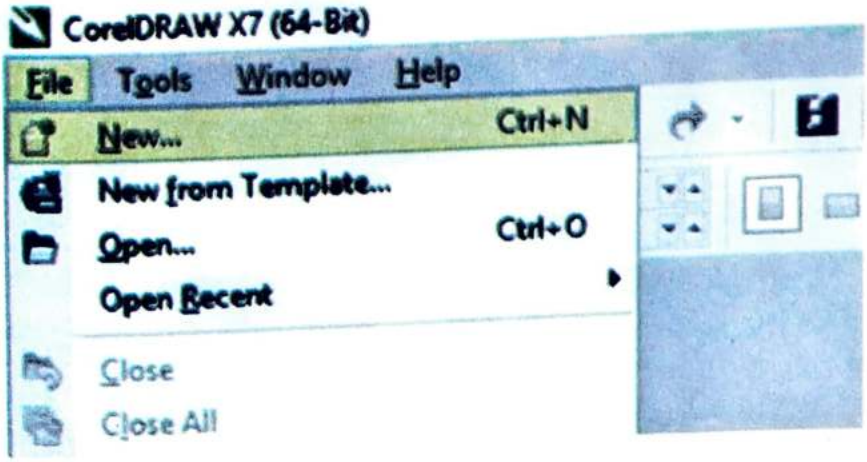
3.6 Creating Graphics & Drawing :-

Party Invitation Card

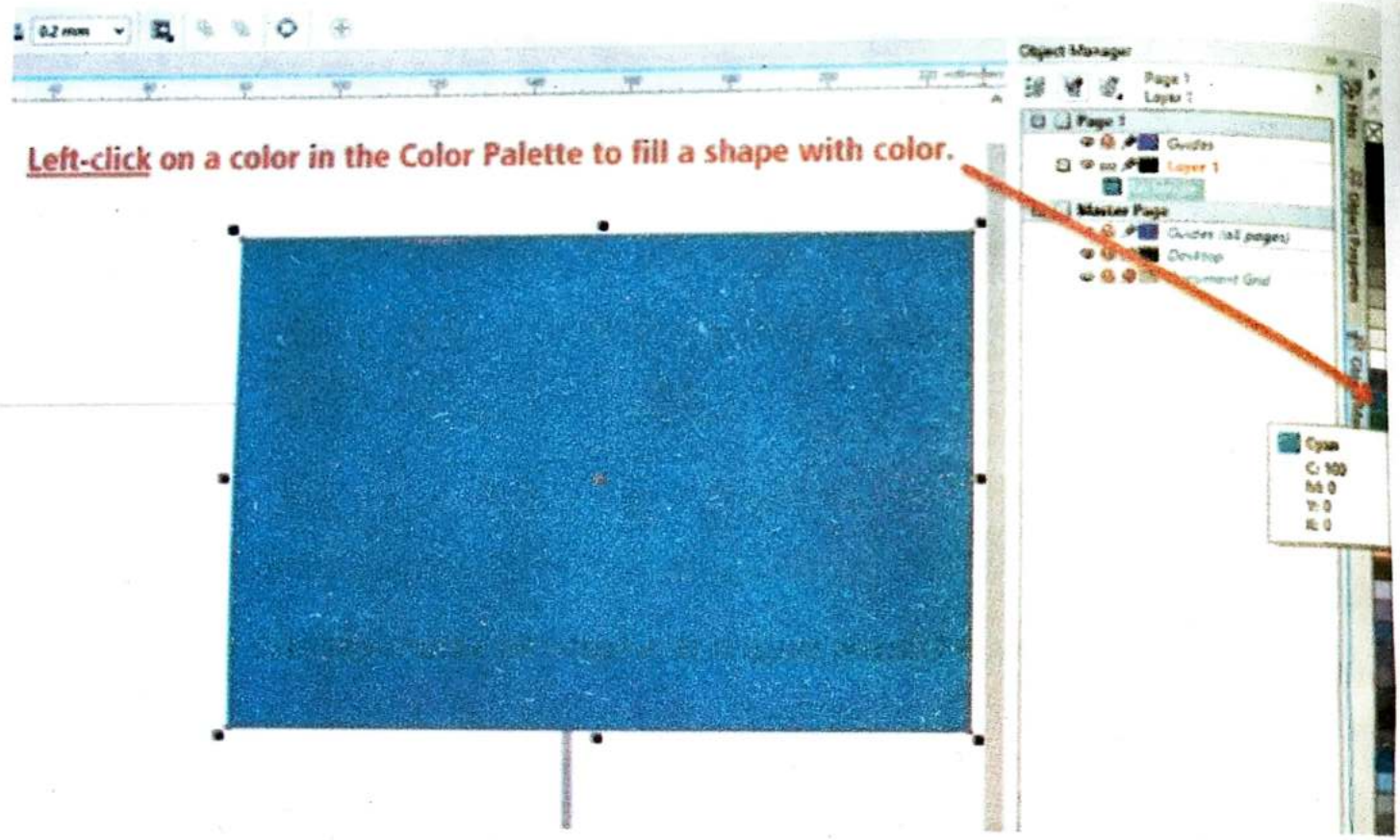
You can creating a party invitation card. You will be adding text and creating colorful vector graphics objects.

Step 1 - Create a New Document :-

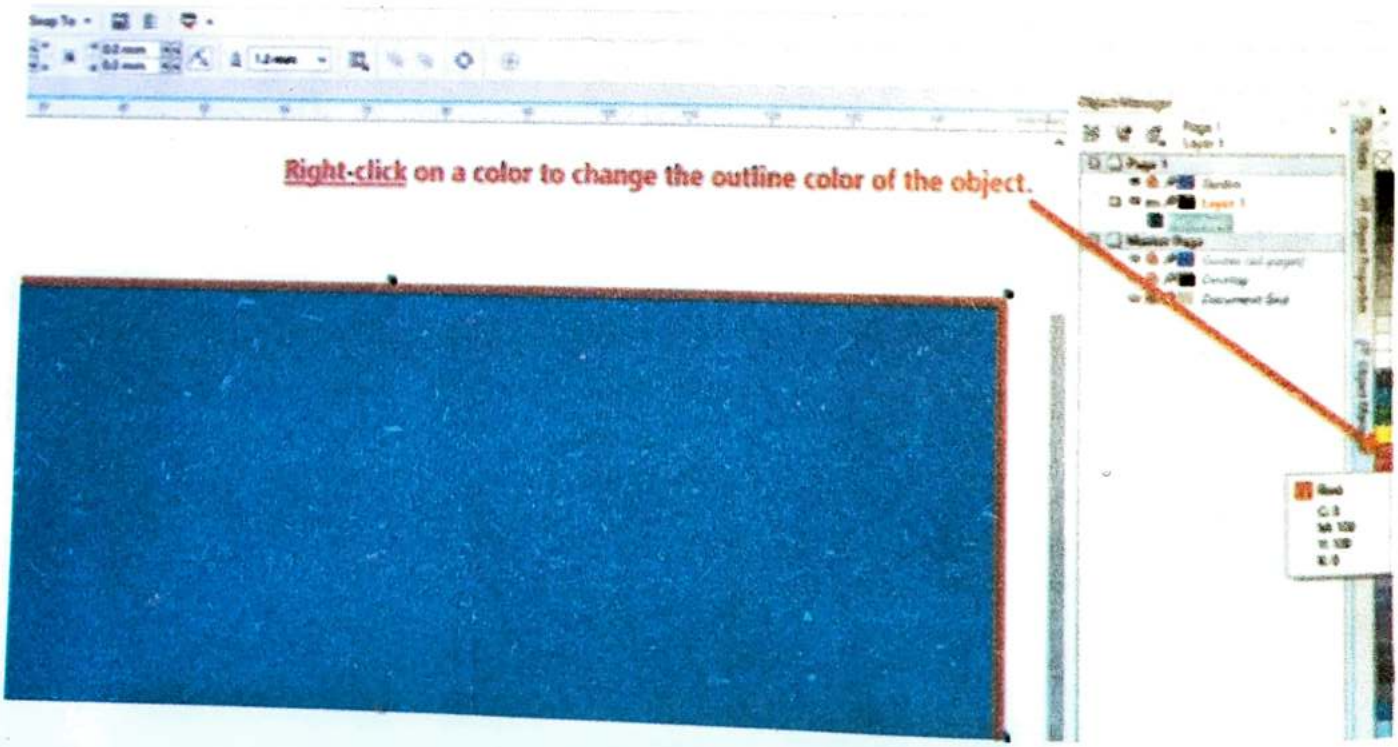
Start by opening a new document. Go to: **File >** then click on **New...** (or use the **keyboard shortcut CTRL+N)**.



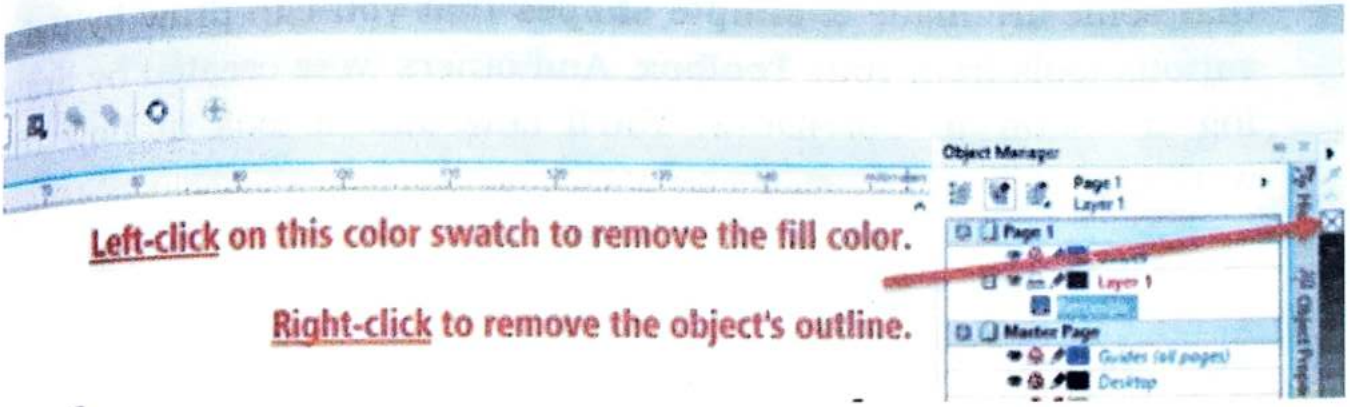
When you create a shape, you can **fill the shape** with color by **left-clicking** on a color in the **Color Palette**.



To **change the outline color** of a shape, **right-click** on a color in the **Color Palette** instead.

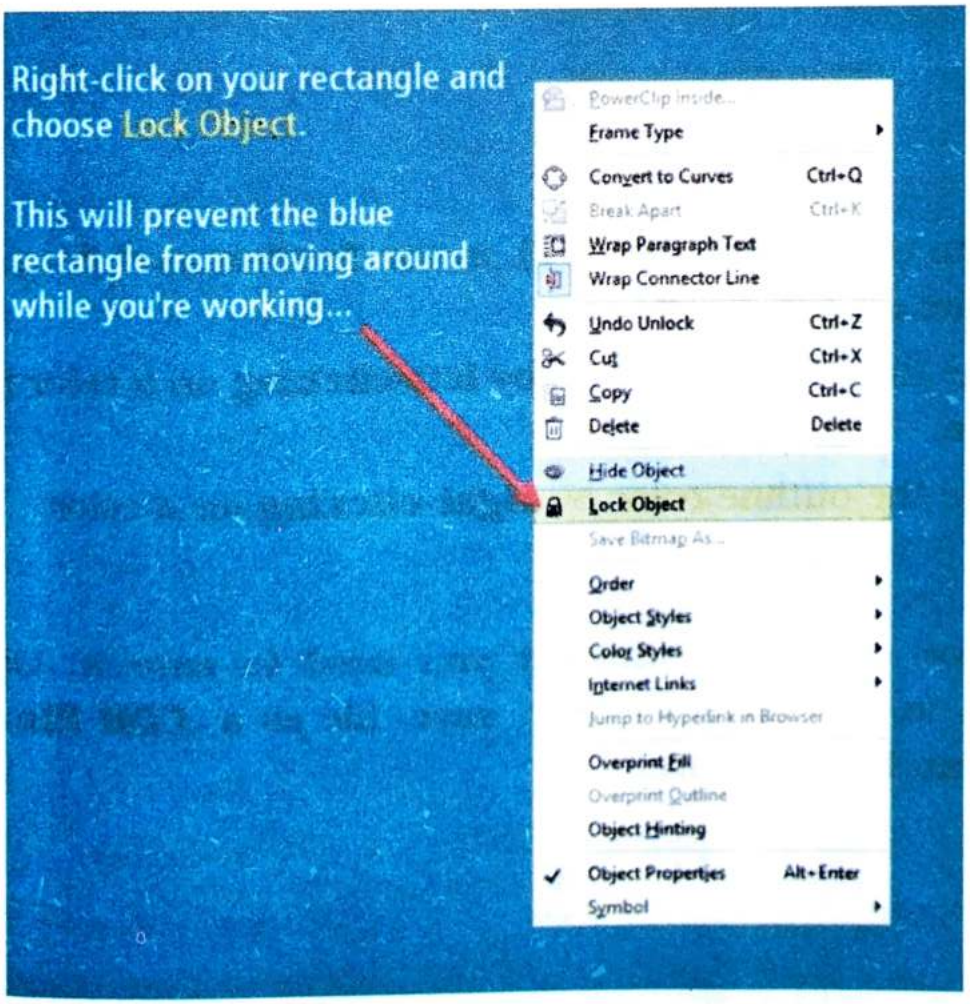


This **'no-color' swatch** at the top of the **Color Palette** lets you remove the color from an object's fill or outline.



Now **left-click on a color** to fill the rectangle with blue and **right-click** on the **no-color swatch** to remove the outline.

To stop background from moving around while we're creating other objects, **right-click** on it and choose **Lock Object** from the correct menu.



Step 3 - Creating basic shapes in CorelDraw

If you take another look at the monsters at the start you'll notice that some are made of **simple shapes** that you can draw by using various tools from your **Toolbox**. And others were created by drawing 'freehand' in CorelDraw. You'll now take a look at how this works.

The Green Monster

Click on the **Ellipse tool (F7)**, in the **Toolbox** and drag on the page to create an oval shape.

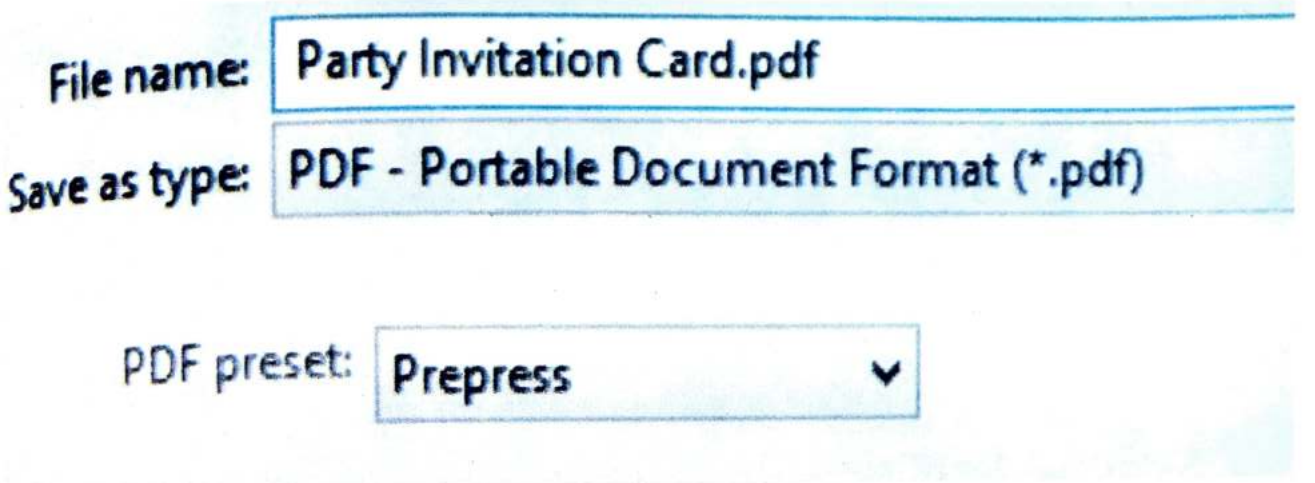
Change the color of the oval by **left-clicking** on a color in the **Color Palette**.

Change the outline color by **right-clicking** on a color.

3.7 Saving Drawing or File :-

Once design is finished you need to save it. Go to **File > Save...** and in the Save window, save file as a **.CDR file** if you want to edit it again in the future.

If you are sending your file to a printers shop to have it printed out, you might want to save the file as a PDF file too. Go to: **File > Publish to PDF** in the PDF export window, choose **Prepress** from the **PDF preset** drop-down list > Click on **Save**.



3.8 Importing and Exporting Images in CorelDraw :-

Click the Table tool, and select the cell where you want to insert the image or graphic. You can also insert a graphic or an image by holding down the right mouse button over the image, dragging the image to a cell, releasing the right mouse button, and then clicking Place inside cell.

You can open AI and PDF files by using the File > Open command as you would any CorelDraw file, or you can import them. When you open AI and PDF files, they are opened as CorelDraw files. When you import AI and PDF files, they are imported as grouped objects and can be placed anywhere within your current drawing.

Exporting is saving a copy of your file or object to a particular format to be used by other programs. Exporting does not affect your working document in any way. CorelDraw exports to any graphic file type most people will ever need. Import/Export File Types. Choose File, Import from the Main menu.

Click File > Import.

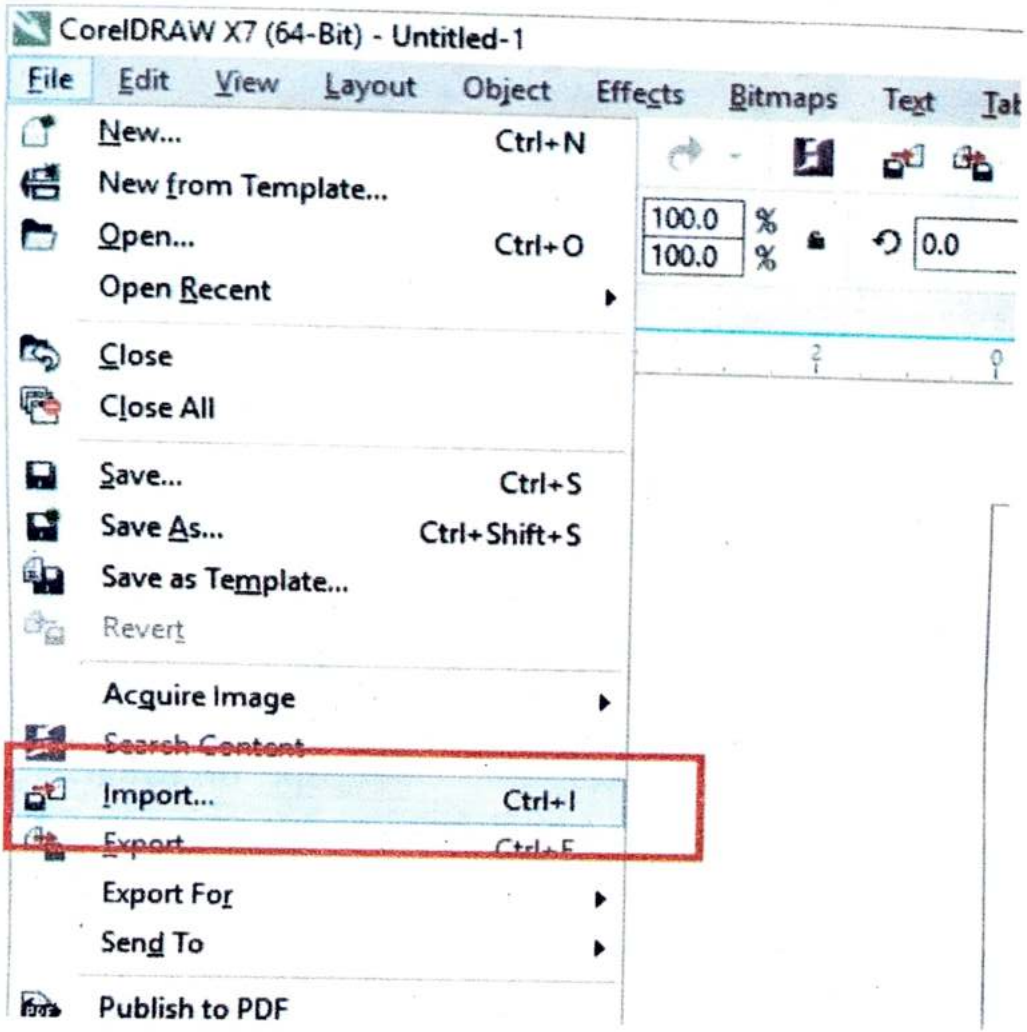
Locate the folder in which the file is stored.

Choose AI - Adobe Illustrator from the Files of type list box.

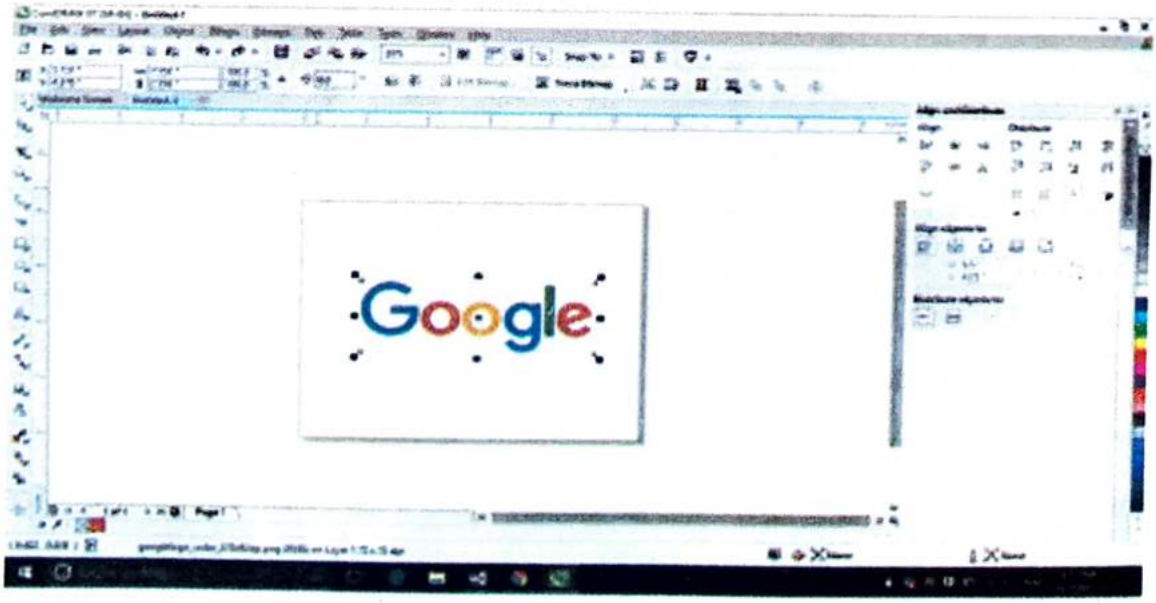
Click the filename, and click Import.

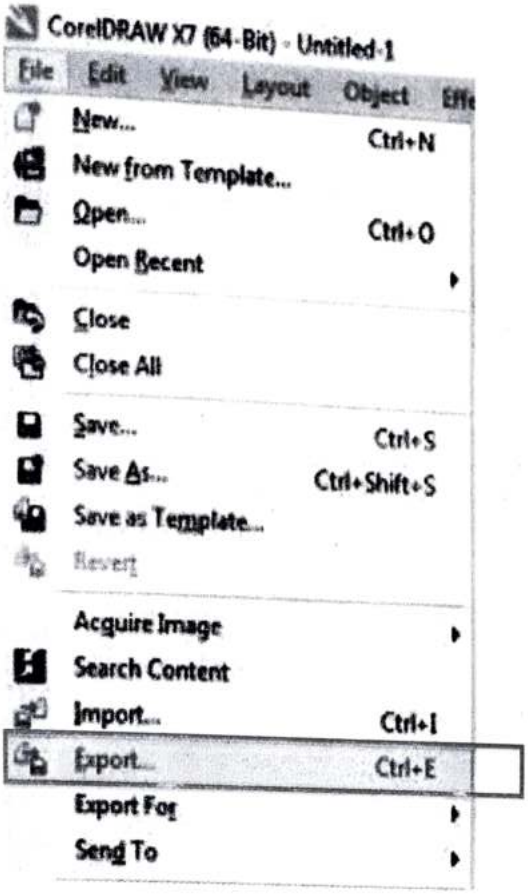
When the import cursor appears, do one of the following :

select **Import** in file (ctrl+I)

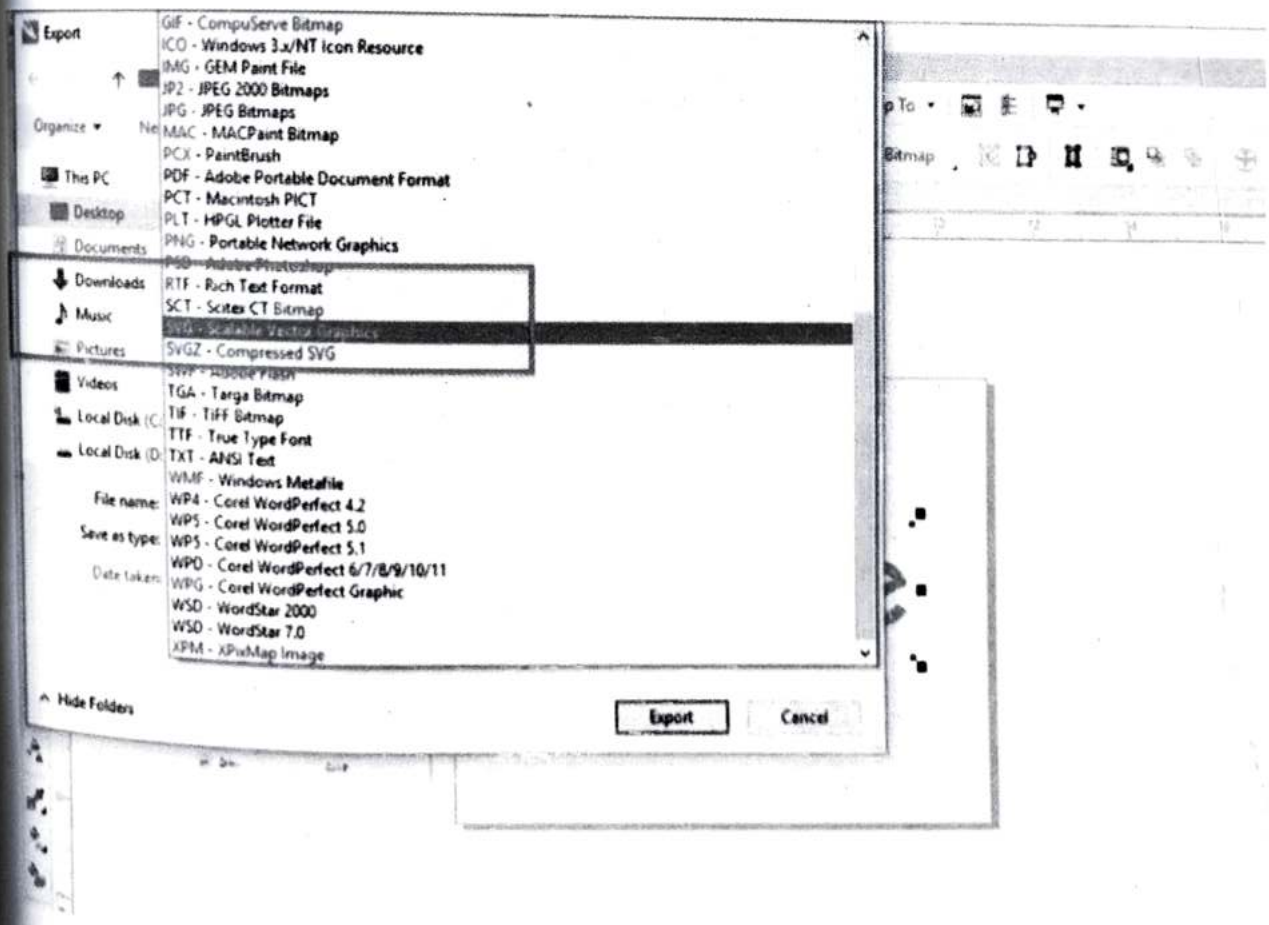


select **png** and select **Export** in File (ctrl+E)

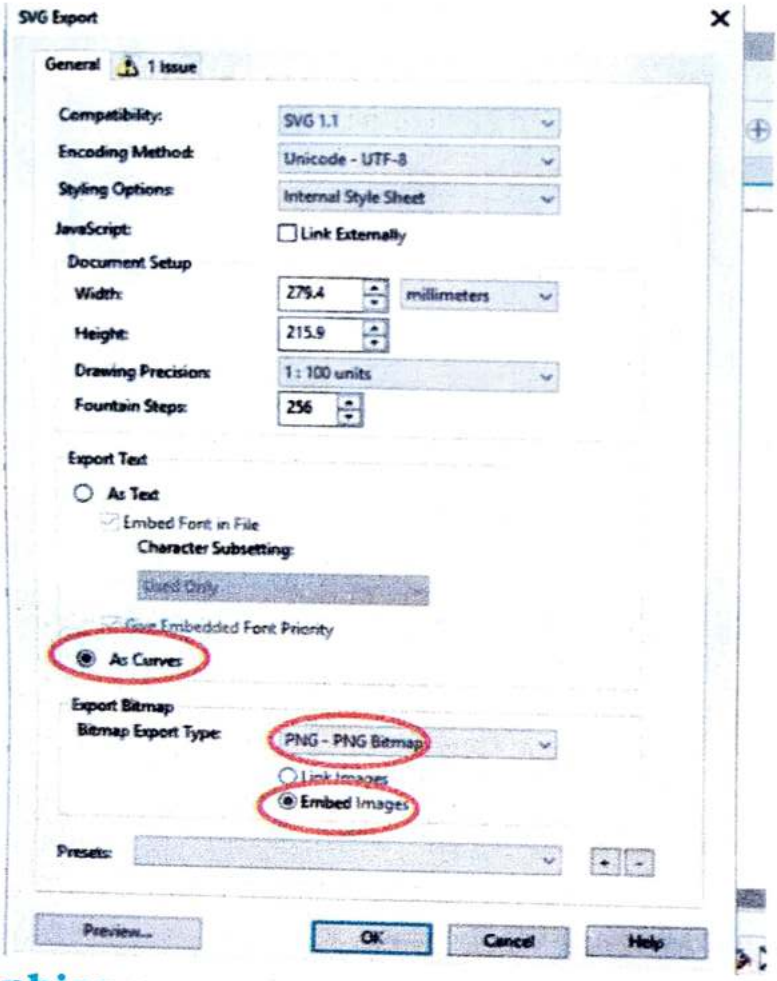




3. Select **SVG** in **save as type** Dropdown



Select the options as shown below



3.9 Editing graphics :-

Process To create or edit a graphic or text style

To create or edit a graphic or text style

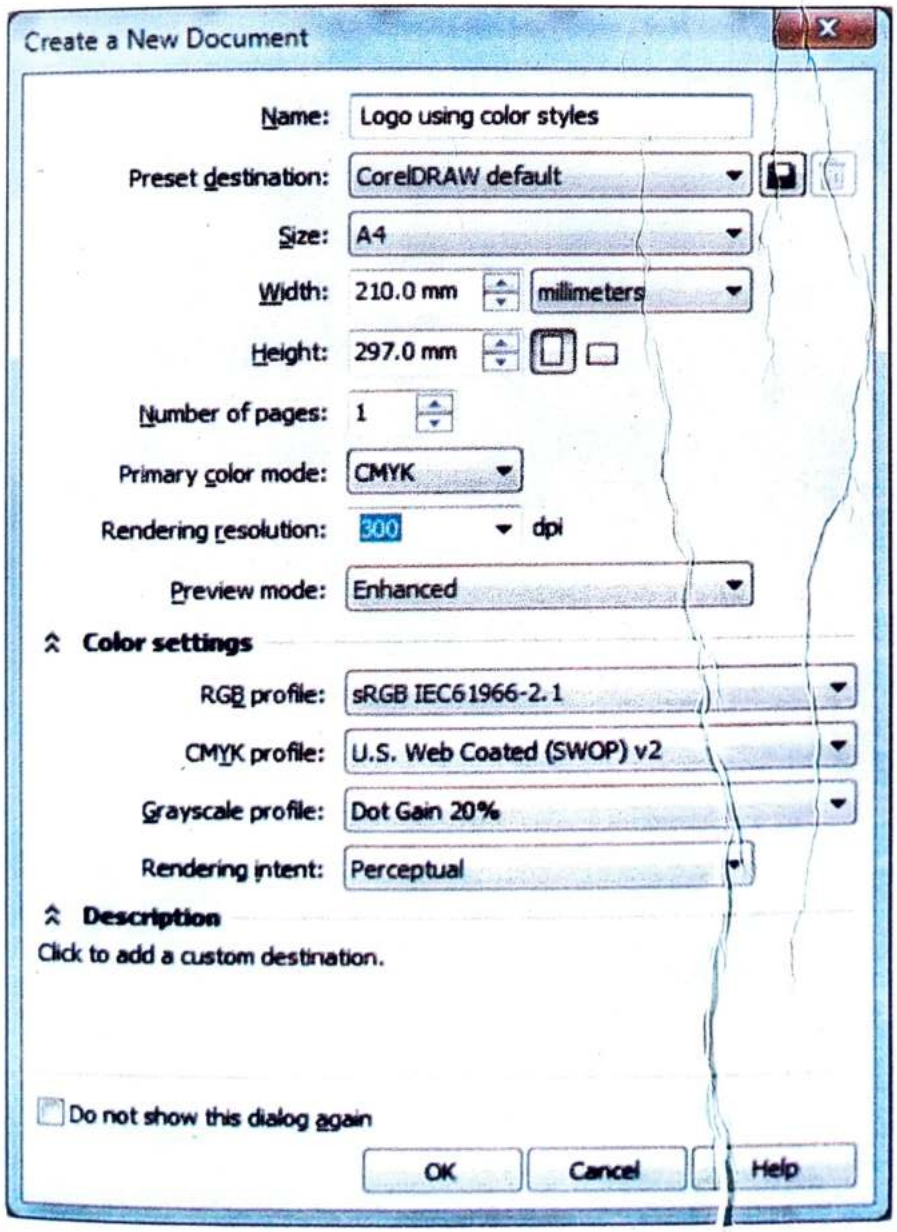
1. Click Tools ▸ Graphic and text styles.
2. In the Graphic and text styles Docker, click the flyout button .
3. **Click New, and click one of the following style types :**
   - Graphic style
   - Artistic text style
   - Paragraph text style
4. Choose a style from the list.
5. Click the flyout button, and click Properties.
6. Click Edit beside a property.
7. Modify any text, fill, or outline properties.

3.10 Designing logo

A **Logo** is a design symbolizing ones organization. Logotype is a graphic representation or symbol of a company name, trademark, abbreviation, etc., often uniquely designed for ready recognition. You may also think of a **Logo** as a simple visual mark to identify your company product or service.

Step 1

Click **File > New** to start a blank document in CorelDraw in Create a New Document dialog box, choose **A4** from the **Size** list box, **CMYK** from the **Primary color mode** list box, and **300 dpi** from the **Rendering resolution** list box (see Figure).

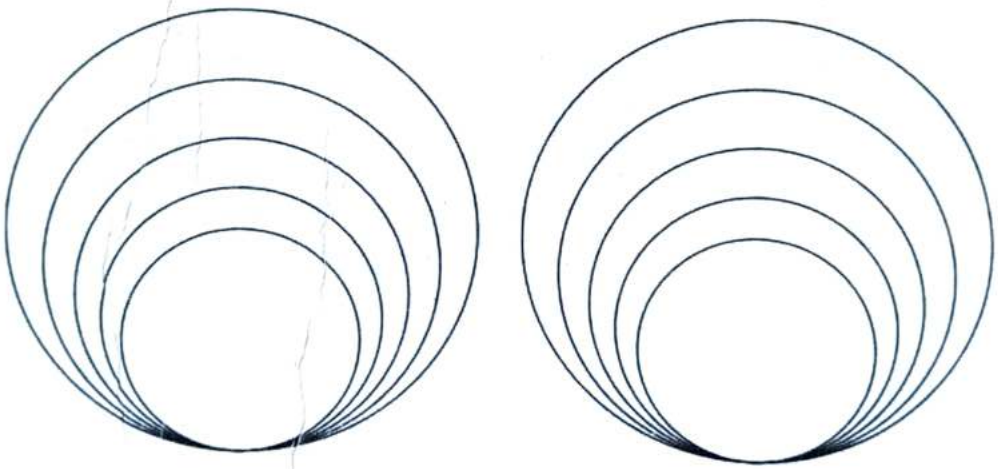


Step 2 In the toolbox, click the Ellipse tool (F7) and create a perfect circle by holding Ctrl key while dragging.

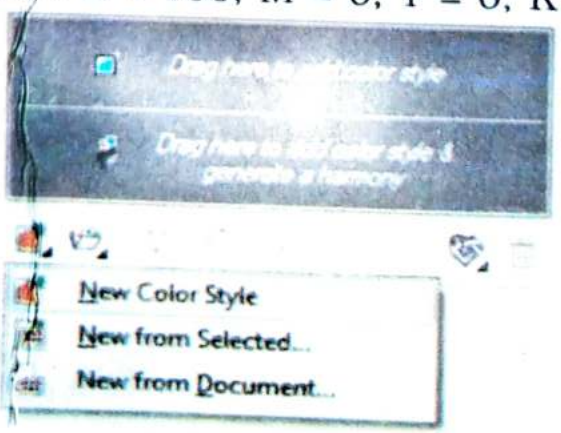
Step 3 Press and hold the Shift key, then drag one of the circle's corner handles toward the inside of the circle until the Scale factor on the property bar is approximately 85%, and then right-click once before releasing the mouse. This will create a copy of the smaller circle.

Step 4 Press Ctrl+R three times to create three additional copies of the circle, each with a sequentially smaller size. So now you have five circles in total.

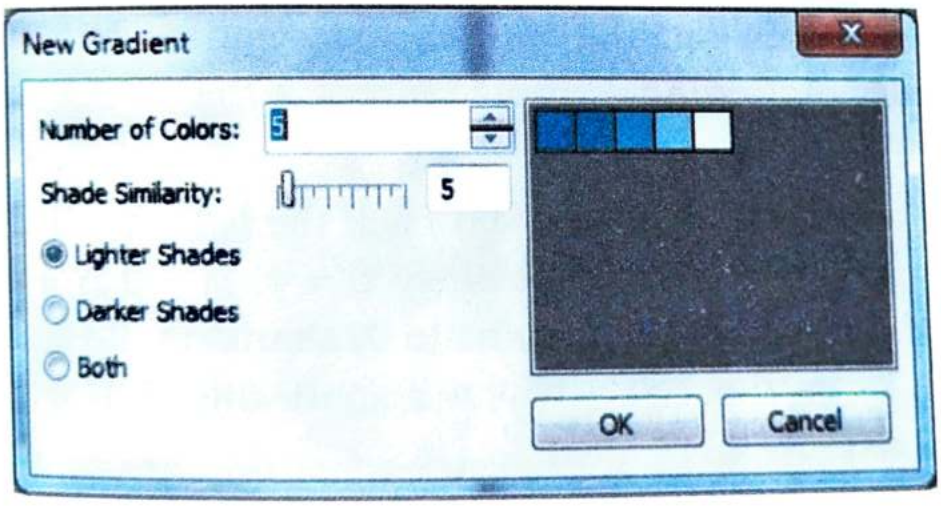
Step 5 Press Ctrl+A to select all five circles, or use the Pick tool to marquee selects them. Press B and then C to bottom center align all circles.



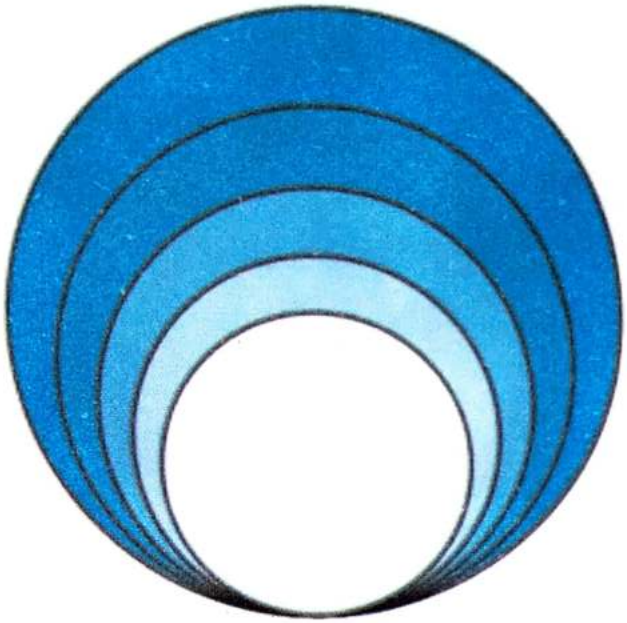
Step 6 Click Tools > Color Styles to open the Color Styles docker (Ctrl+F6). Click the New color style button and choose New Color Style. This will create a new color style. Use the Color Editor to adjust the CMYK values as follows : C = 100, M = 0, Y = 0, K = 0.



Step 7 Select the new cyan ColorStyle1 swatch, click the New color harmony button, and choose New Gradient. In the New Gradient dialog box, click OK to accept the default values and settings. This will create a gradient of five lighter shades.

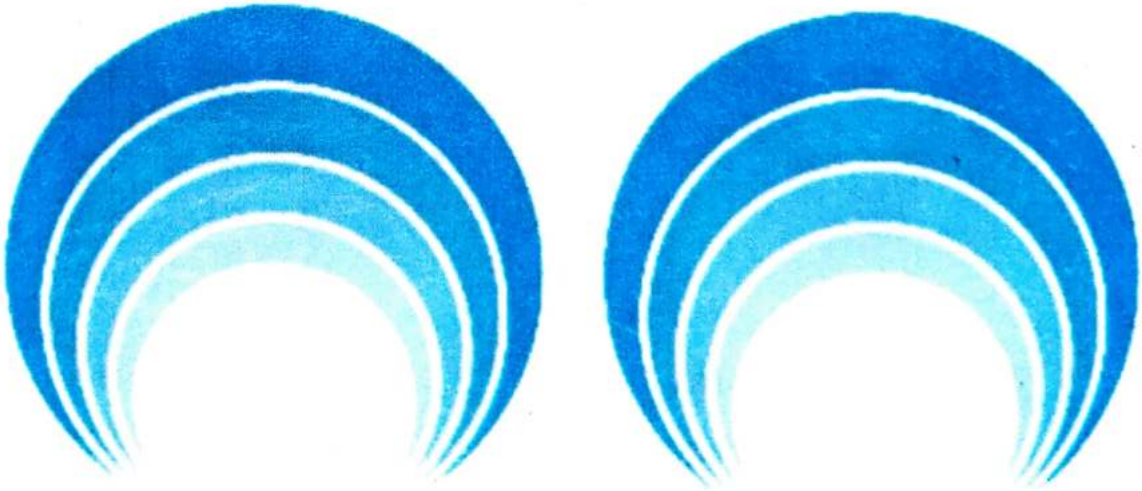


Step 8 Select the smallest, innermost circle. In the Color Styles docker, double-click the lightest shade of the cyan color gradient to fill the circle with that color. Select and then fill the other four circles each with an incrementally darker shade.

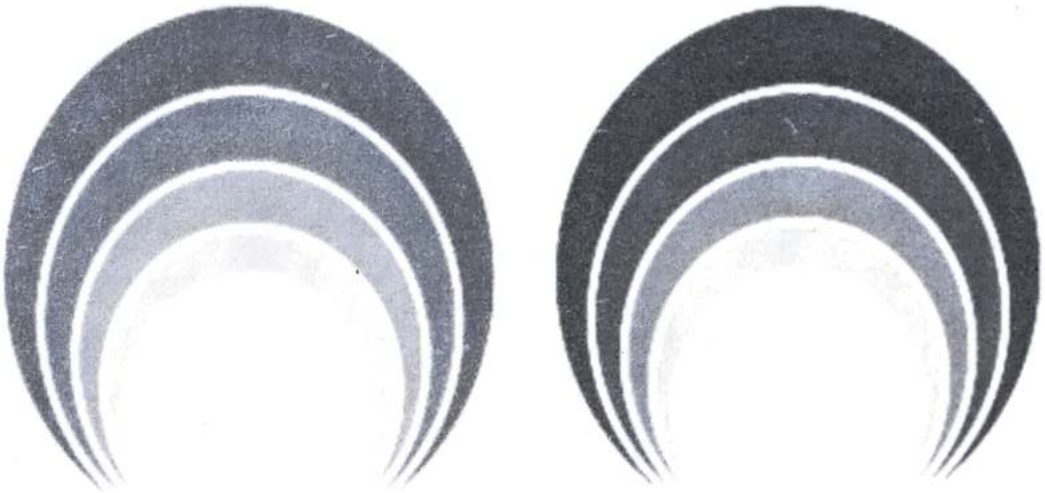


Step 9 Select all the circles and right-click the white color swatch on the Color palette to change the outline color. Optionally, you can use the Object Properties docker (Alt+Enter) to increase the outline Width to 3 or 4 points.

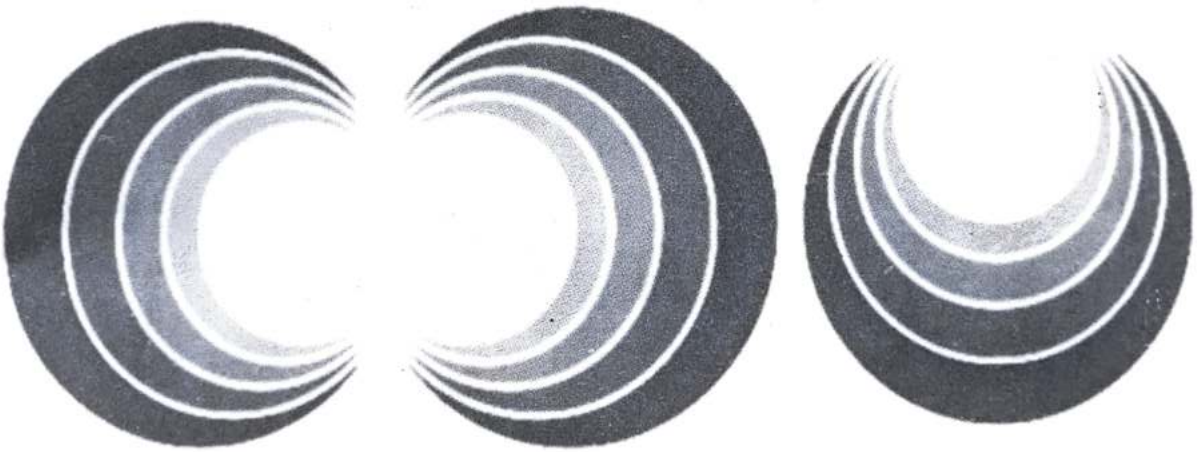
Next, in the Color Styles docker, click the lightest shade of the cyan gradient. The value of this color is likely C = 4, M = 0, Y = 0, K = 0. Use the Color Editor to reduce the C value to 0, changing the lightest shade to white. The color in the circle will automatically update to reflect the change.



Step 10 In the Color Styles docker, click the folder icon (situated to the left of the first gradient color swatch). This selects all the shades in the gradient and links them into a hue-based relationship.



Step 11 alternatively, you can also change the alignments of the circles to get different looks. Select all the circles, and then press E and R, or E and L, or C and T to achieve different alignments.



3.11 Making a Greeting Card :-

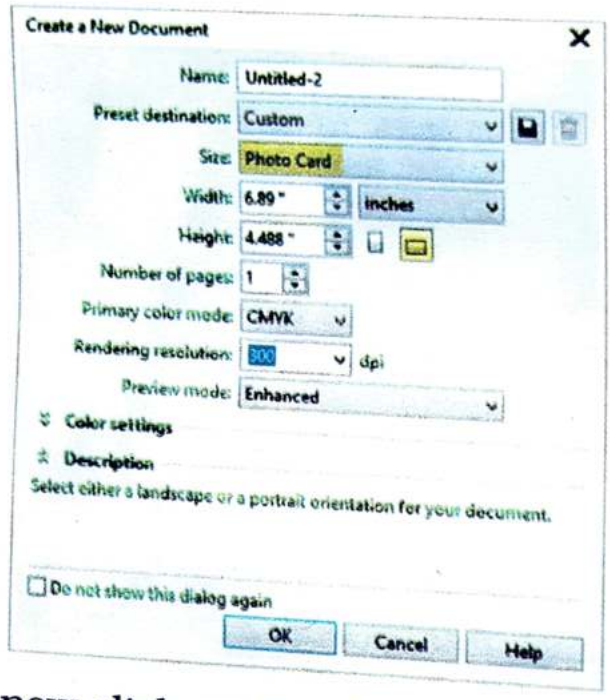
Click and drag to create a text box, Lay out the inside of the card then click within it, and begin typing. Adjust font, size, alignment, and color, from the property bar and color palette, until text looks just right.

Creating card design in CorelDraw

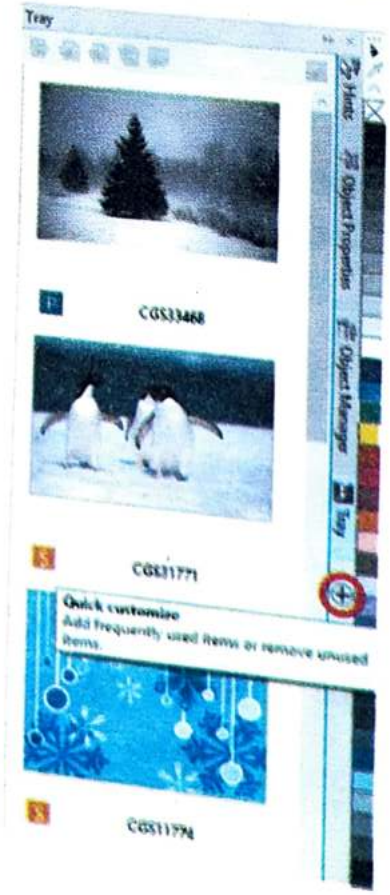
Now that you have all your creative assets, it's time to get started on the card design itself.

Open a new CorelDraw file: **File > New... (Ctrl+N)**.

In this case you have chosen a photo card page size in Landscape format, but you can of course, choose the paper size best suited to your purpose.



In CorelDraw, now click on the **Quick Customize** icon to open up the **Dockers** selection, and set a check next to the **Tray** docker to open it.

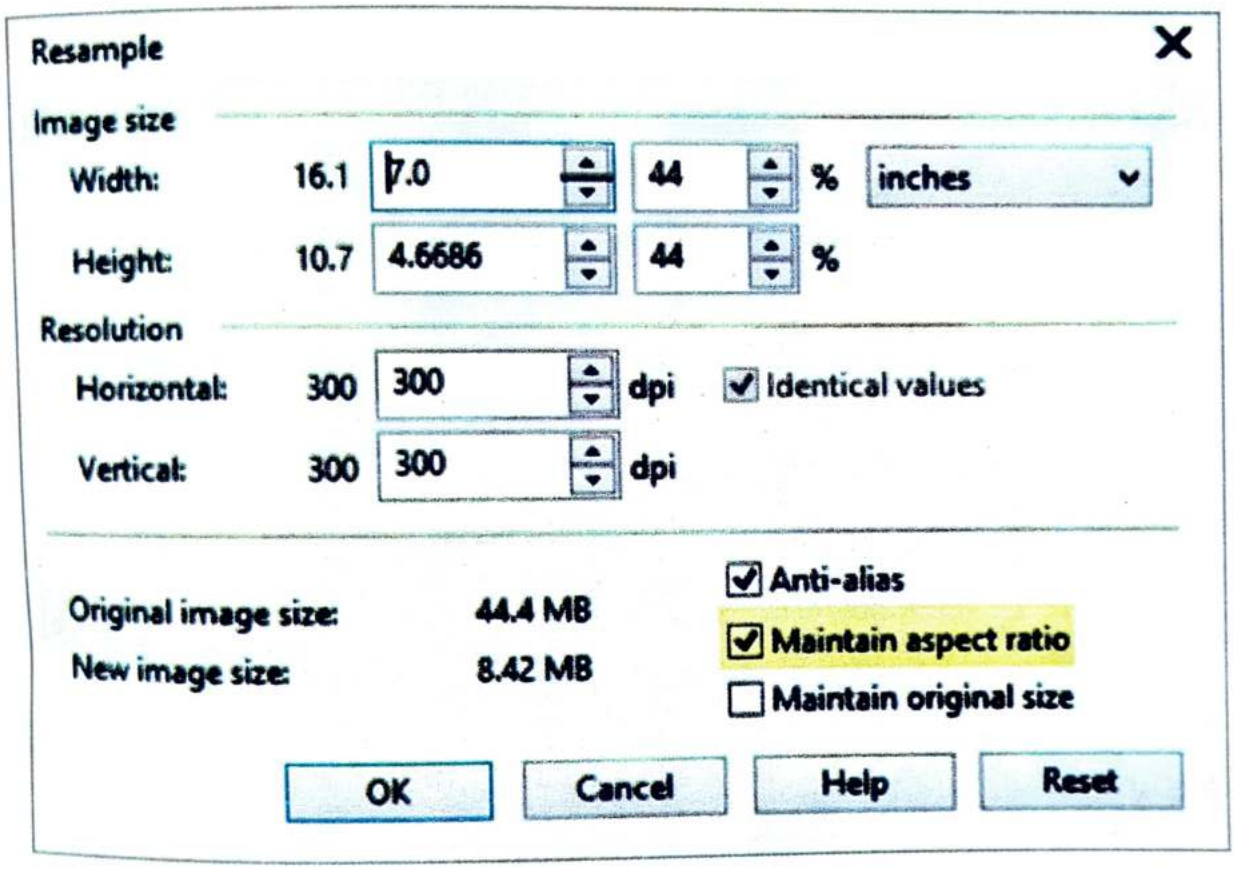


You first import a background image by dragging the image from the **Tray** to the document.

The image is much larger than my card and needs to be resampled. To do this you click on **Bitmaps > Resample**.

In the **Resample dialog box**, you leave the resolution at **300 dpi** if you want to have your card professionally printed. But if you are printing the cards at home, then a resolution of **150 dpi** would probably suffice.

Now change the **image dimensions** (width and height), to roughly match my card size.



Click **OK** then press **'P'** on the keyboard to center the resampled image on the page.

Now go into **Wireframe** view **(View > Wireframe)**, and using the **Crop tool (Toolbox > Crop tool)**, and crop the image to the size of the page (In the **Standard toolbar** at the top of the screen below the **Menu bar**, turn off **Snap To > Objects** for this, and check snap to **Page**. This will make cropping to page size easier). After cropping, disable snap to **Page** and re-check snap to **Objects**.

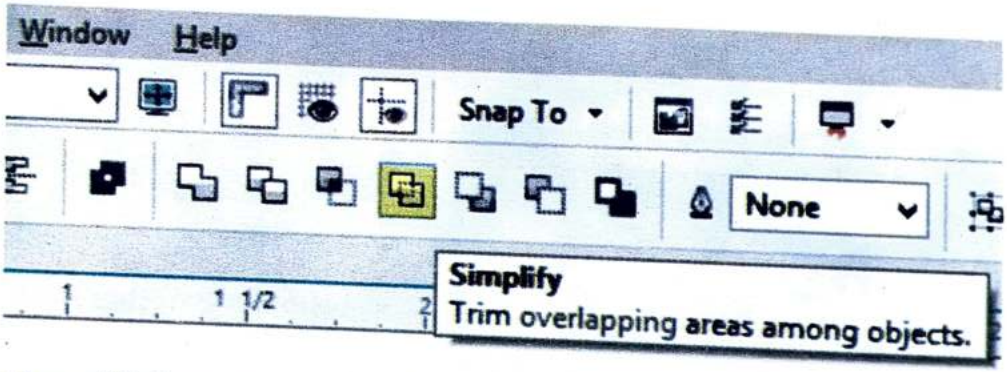
You now want to create a dark border around my image which will serve as a background for the decorative frame that you are going to include. Double-click on the **Rectangle tool (Toolbox > Rectangle tool)**, to create a page frame.

In the **Object Manager docker** you can see that the frame is sitting below the bitmap. Drag it above the bitmap.

Using the **Color Eyedropper** tool in the **Toolbox**, you sample one of the darker greys in the background image then click inside the frame to fill it with color.

Press the **'+' key** on the numerical keypad (or use **Ctrl+C/Ctrl+V** to copy and paste the rectangle back in). Fill the second rectangle with white and holding down the **Shift+key**, resize inwards to create a grey border.

Select both rectangles and click on the **Simplify** command from the **Property** bar.

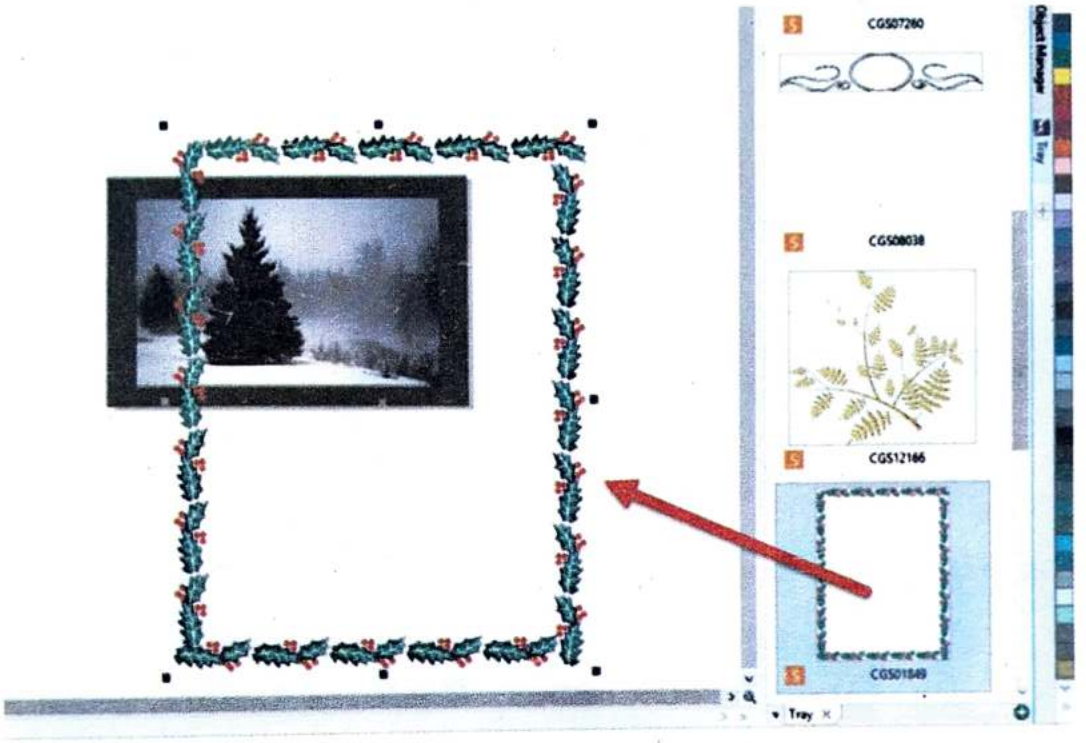


After simplifying, remove the white rectangle and you should be left with this grey frame.

Now you want to add a festive frame to design, so drag the vector frame that you found into the page.

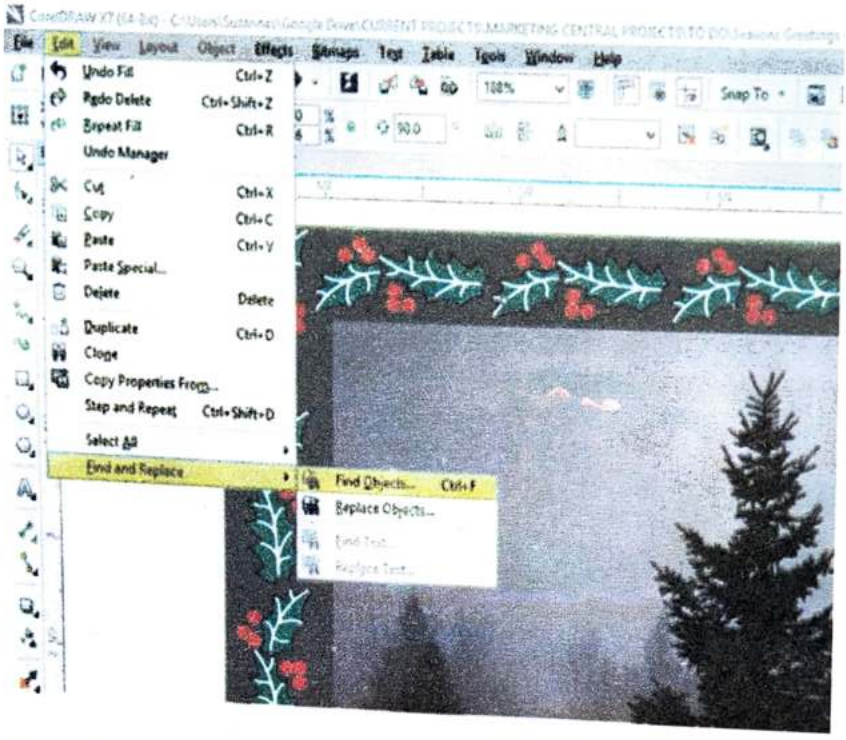
This frame is of course too large and in portrait format, but being vector, you can simply add a **90° rotation** in the **Property bar** > press **'P'** to center the frame on the page > then holding down the **Shift-key**, you can re-size the frame inwards without any loss of quality.

Dragging the decorative frame to the document.



Frame after rotating 90° and resizing.

You can going to replace the color of the leaves in the border, which don't really match the tone of the background, with another, more suitable color by using the Find and Replace command **(Edit > Find and Replace > Find Objects...)**.



In the **Find and Replace** dialog box, select **Begin a New Search > Next.**

Click on the **Fills tab** and choose **Uniform Color**.

On the next page click on **Specific Uniform Color Fill** and use the **Eyedropper tool** to pick up the green of the leaves in the frame (this is the color that will be replaced).

Click on **Next > Finish > Find All >** say **Yes** when asked if the objects can be ungrouped.

With all green leaf objects now selected, choose a darker, more fitting green from the **Color Palette**.

Don't forget to save your document now and again (Ctrl+S), especially when working on a longer project.

SUMMARY

- **CorelDraw** is a graphics and designing software
- **Bitmap images** are made up of tiny dots or squares.
- **Vector images** are made up of many geometric objects.
- **Pixel** is a single square on computer screen.
- **PPI** stand for Pixels per inch.
- **Menu Bar** is containing a draw down menu choices.
- **Toolbar** that contains alternate routes to the menu and different directions.
- **Title bar** showing the top of the window.
- **Toolbox-** A coasting bar with devices for making, filling, and adjusting objects in the illustration.
- **Color Palette-** A dockable bar that contains shading swatches.
- **Status bar-** A zone at the base of the application window that contains data about article properties,
- **Drawing window-** The region outside the illustration page circumscribed by the parchment bars and application controls.

- **Drawing window-** The region outside the illustration page circumscribed by the parchment bars and application controls.
- **Pick tool** - To select, resize, and rotate toward the image object.
- **Crop tool** - Remove the areas outside a selection.
- **Shape tool (F10)** - Editing an image object shape or text character by manipulating nodes.
- **Ellipse tool (F7)** - Draw circles and ellipses by dragging in the drawing window.
- **Text tool (F8)** - Add and edit paragraph and artistic text.

TRUE/FALSE

Q.1 State whether the following statements are True or False :

- CorelDraw is designing software. (T)
- Bitmap images are made up of row and column of these pixels. (T)
- Vector images are made up of many geometric objects. (T)
- Pixels are many square on a computer screen (F)
- Logo is a symbolic to identify an organization. (T)

EXERCISE

Q.1. What is CorelDraw ?

Q.2. What is a Vector image ?

Q.3. What is Bitmap image ?

Q.4. What is the difference between Bitmap Image and Vector image.

Q.5. What is the difference between Pixel & PPI ?

Q.6. Explain the five component of CorelDraw.

Q.7. What are tools in CorelDraw ?

Q.8. Explain crop tool, picture tool, zoom tool & text tool.

Q.9. How can you import & export file in CorelDraw.

Q.10. What is logo ?

Q.11. How can save drawing or file in CorelDraw.

—End—