

SOURCE CODE:

```
import cv2

import numpy as np

#To load the image and display
image=cv2.imread("image.jpeg")

cv2.imshow("original_image",image)

#The following command waits till we press the key
cv2.waitKey(0)

#Defining colours
green=(0,255,0)
red=(0,0,255)
blue=(255,0,0)
white=(255,255,255)
black=(0,0,0)


#To find the dimensions of the image
print("The original dimension")

height,width,_=image.shape
print('width:' ,width)
print('height:',height)


#Drawing a line, x,y are the coordinates of the 2 terminal
points x=(50,190)

y=(200,190)

#FORMAT cv2.line(image_name,start point,end
point,color,thickness) line=cv2.line(image,x,y, white, 3)

cv2.imwrite('line.jpeg',line)

cv2.imshow("line",line)
```

```
cv2.waitKey(0)
#Adding text to the image,z is the coordinate of the position

z=(15,25)
```

```
#FORMAT
cv2.putText(image_name,text,position,font,scale,color,thickness)
text=cv2.putText(image,"hello",z,2,1,white,2)

cv2.imwrite('text.jpeg',text)

cv2.imshow("text",text)

cv2.waitKey(0)
```

```
#Drawing a circle on the image, q is the center of the circle

q=(150,90)
```

```
#FORMAT cv2.circle(image_name,center,radius,color,thickness)

circle=cv2.circle(image,q,80,green,2)

cv2.imwrite('circle.jpeg',circle)

cv2.imshow("circle",circle)

cv2.waitKey(0)
```

```
#Drawing an rectangle on the image,a is the top left coordinate, b is the bottom right
coordinate a=(14,2)

b=(92,32)
```

```
#FORMAT cv2.rectangle(image_name,top left coordinate,bottom right
coordinate,color,thickness) rectangle=cv2.rectangle(image,a,b,white,2)

cv2.imwrite('rectangle.jpeg',rectangle)

cv2.imshow("rectangle",rectangle)
```

```
cv2.waitKey(0)
```

```
#Drawing an ellipse on the image, c is the major axis length and d is the minor axis
```

```
length c=(90,155)
```

```
d=(30,35)
```

```
#FORMAT cv2.ellipse(image_name,major axis length,minor axis length,angle,start angle,end  
angle,color,thickness)
```

```
ellipse=cv2.ellipse(image,c,d,90,0,360,red,2)
```

```
cv2.imwrite('ellipse.jpeg',ellipse)
```

```
cv2.imshow("ellipse",ellipse)
```

```
cv2.waitKey(0)
```

```
#To close all windows created till now
```

```
cv2.destroyAllWindows()
```

INPUT: IMAGE



OUTPUT: Original Dimensions

The original dimension
width: 245
height: 148

LINE:



TEXT:



CIRCLE:



RECTANGLE:



ELLIPSE:

