

In [2]:

```
import cv2
import string
import os
d={}
c={}

for i in range(255):
    d[chr(i)]=i
    c[i]=chr(i)

#print(c)

x=cv2.imread("C:/Users/VISHNU VARDHAN/Downloads/New folder (2)/abd.jpg")

i=x.shape[0]
j=x.shape[1]
print(i,j)

key=input("Enter key to edit(Security Key) : ")
text=input("Enter text to hide : ")

kl=0
tln=len(text)
z=0 #decides plane
n=0 #number of row
m=0 #number of column

l=len(text)

for i in range(l):
    x[n,m,z]=d[text[i]]^d[key[kl]]
    n=n+1
    m=m+1
    m=(m+1)%3 #this is for every value of z , remainder will be between 0,1,2 . i.e G,
               #whatever be the value of z , z=(z+1)%3 will always be between 0,1,2 . Tl
    kl=(kl+1)%len(key)

cv2.imwrite("encrypted_img.jpg",x)
os.startfile("encrypted_img.jpg")
print("Data Hiding in Image completed successfully.")
#x=cv2.imread("encrypted_img.jpg")

kl=0
tln=len(text)
z=0 #decides plane
n=0 #number of row
m=0 #number of column

ch = int(input("\nEnter 1 to extract data from Image : "))

if ch == 1:
    keyl=input("\n\nRe enter key to extract text : ")
    decrypt=""

    if key == keyl :
        for i in range(l):
            decrypt+=c[x[n,m,z]^d[key[kl]]]
            n=n+1
            m=m+1
            m=(m+1)%3
            kl=(kl+1)%len(key)
        print("Encrypted text was : ",decrypt)
    else:
        print("Key doesn't matched.")
else:
    print("Thank you. EXITING.")
```

224 224  
Enter key to edit(Security Key) : 12345  
Enter text to hide : I am working  
Data Hiding in Image completed successfully.  
  
Enter 1 to extract data from Image : 1  
  
Re enter key to extract text : hey  
Key doesn't matched.

In [ ]: