COMPUTER NETWORKS LAB

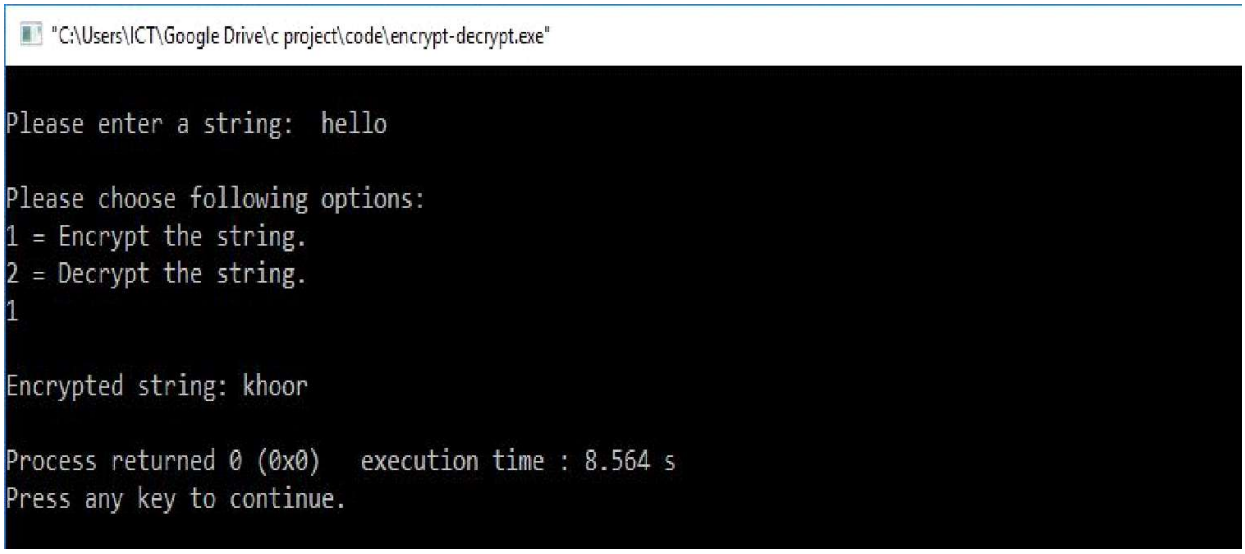
EXPERIMENT- 7

Aim:- Implement data encryption and data decryption

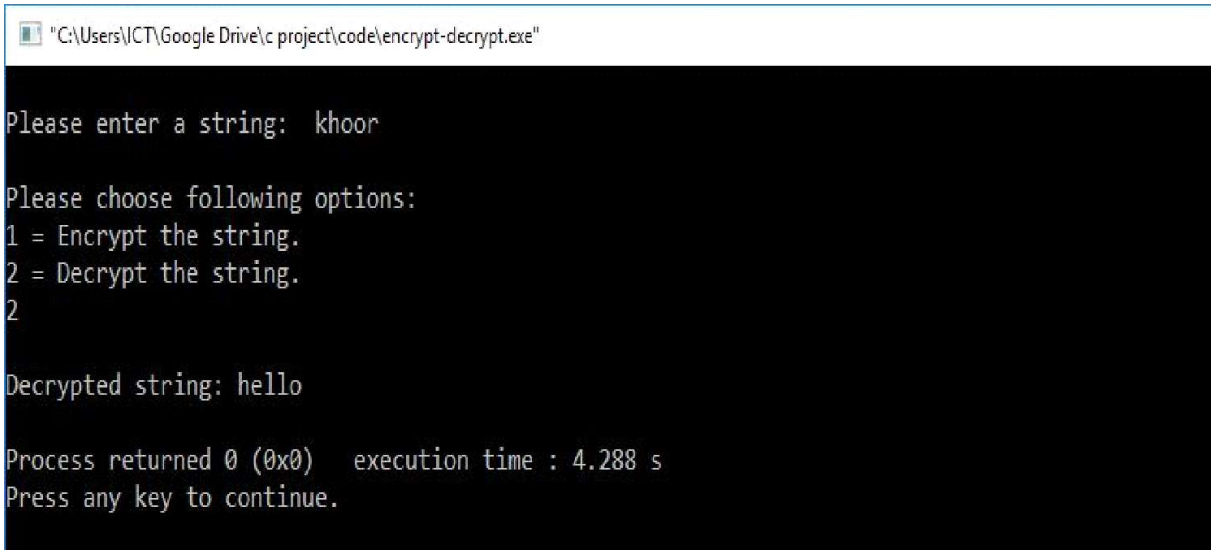
```
#include <stdio.h>
int main()
{
  int i, x;
  char str[100];
 printf("\nPlease enter a string:\t");
  gets(str);
printf("\nPlease choose following options:\n");
  printf("1 = Encrypt the string.\n");
  printf("2 = Decrypt the string.\n");
  scanf("%d", &x);
  //using switch case statements
  switch(x)
  {
  case 1:
    for(i = 0; (i < 100 && str[i] != '\0'); i++)
      str[i] = str[i] + 3; //the key for encryption is 3 that is added to ASCII value
    printf("\nEncrypted string: %s\n", str);
    break;
case 2:
    for(i = 0; (i < 100 && str[i] != '\0'); i++)
      str[i] = str[i] - 3; //the key for encryption is 3 that is subtracted to ASCII value

    printf("\nDecrypted string: %s\n", str);
    break;
default:
    printf("\nError\n");
  }
  return 0;
}
```

OUTPUT:-

Encryption



#Decryption



Explanation

In the above program, we have used simple logic for encrypting and decrypting a given string by simply adding and subtracting the particular key from ASCII value.