b) Substitution Cipher

#include <stdio.h>

int main()

{

char str[100];

int key, i=0, left;

printf("Enter your plain text : ");

scanf("%[^\n]s",str);

printf("Enter the key : ");

scanf("%d",&key);

if(key==0)

{

printf("INVALID INPUT");

}

else

{

while(str[i]!='\0')

{

//printf("%d\n", str[i]);

if(str[i]>=48 && str[i]<=57)

{

if(str[i]+key<=57)

{

str[i] = str[i] + key;

}

else

{

left = (str[i] + key) - 57;

str[i] = 47 + left;

}

}

else if(str[i]>=65 && str[i]<=90)

{

if(str[i]+key<=90)

{

str[i] = str[i] + key;

}

else

{

left = (str[i] + key) - 90;

str[i] = 64 + left;

}

}

else if(str[i]>=97 && str[i]<=122)

{

if(str[i]+key<=122)

{

str[i] = str[i] + key;

}

else

{

left = (str[i] + key) - 122;

str[i] = 96 + left;

}

}

i++;

}

printf("The encrypted text is : %s",str);

}

return 0;

}

Output:

Enter your plain text: welcome

Enter the key: 4

The encrypted text is: aipgsqi