Program and Output

Program :

```
#include<stdio.h>
#include<string.h>
#include<conio.h>
#include<ctype.h>
void main()
{
   char plain[10],cipher[10];
   int key,i,length;
   int result;
   printf("\n Enter the plain text:");
   scanf("%s",plain);
   printf("\n Enter the key value:");
   scanf("%d",&key);
   printf("\n\n\t PLAIN TEXt:%s",plain);
   printf("\n\n\t ENCRYPTED TEXT:");
   for(i=0,length=strlen(plain);i<length;i++)
   {
      cipher[i]=plain[i]+key;
      if(isupper(plain[i])&&(cipher[i]>'z'))
      cipher[i]=cipher[i]-26;

      if(islower(plain[i])&&(cipher[i]>'z'))
      cipher[i]=cipher[i]-26;
      printf("%c",cipher[i]);
   }
   printf("\n\n\t AFTER DECRYPTION :");
   for(i=0;i<length;i++)
   {
```

```
    plain[i]=cipher[i]-key;
  if(isupper(cipher[i])&&(plain[i]<'A'))
  plain[i]=plain[i]+26;
  if(islower(cipher[i])&&(plain[i]<'a'))
  plain[i]=plain[i]+26;
  printf("%c",plain[i]);
  }
  getch();
}
```

Output :