Q1: A website requires the users to input username and password to register. Write a program to check the **validity of password** input by users. Following are the criteria for checking the password:

• At least 1 letter between **[a-z]**

• At least 1 number between **[0-9]**

• At least 1 letter between **[A-Z]**

• At least 1 character from **[$#@]**

• Minimum length of transaction password: **6**

• Maximum length of transaction password: **12**

**Input Format:**

Read a string of any length

**Output Format:**

Display 1 if password is valid, else display 0

**Sample Input:**

Amr3@4it

**Sample Output:**

1

Ans:

#include<stdio.h>

#include<string.h>

int main()

{

int f1=0,i,len,f2=0,f3=0,f4=0;

char s[50];

gets(s);

len=strlen(s);

if (len>=6&&len<=12)

{

for (i=0;i<len;i++)

{

if (s[i]>='a'&&s[i]<='z')

f1=1;

if (s[i]>='A'&&s[i]<='Z')

f2=1;

if (s[i]>='0'&&s[i]<='9')

f3=1;

if (s[i]=='$'||s[i]=='#'||s[i]=='@')

f4=1;

}

if (f1==1&&f2==1&&f3==1&&f4==1)

printf("%d",1);

else

printf("%d",0);

}

else

printf("%d",0);

}

Q2: Aryan needs to access his Gmail account in a secure way.

Aryan enters the password. The password needs to be encrypted. Can you help Aryan to write a C program for encrypting the string using the following way.

Read an input message, and applies a particular shift/key to every letter in the forward direction. Eg: If your password is “crazy” , shift =2, then encrypted password is “etcba” [with a shift of 2, c would be replaced by e, r would become t , z would become b and so on].

**Input Format:**

First Input is the password.

Second input is the shift value

**Output Format:**

Display the encrypted password

**Input**

crazy

5

**Output**

hwfed

Ans:

#include<stdio.h>

#include<string.h>

int main()

{

int i,len,shift;

char s[30];

gets(s);

//puts(s);

scanf("%d",&shift);

len=strlen(s);

for (i=0;i<len-1;i++)//while submitting give i<len

{

s[i]=s[i]+shift;

//printf("%c",s[i]);

if (s[i]>'z')

{

s[i]=s[i]-26;

}

}

puts(s);

}