

WAP to read a character from keyboard and convert it into uppercases if it is lowercase and vice versa.

```
#include<stdio.h>
#include<conio.h>
int main()
{
    char c;
    clrscr();
    printf("Enter character:");
    scanf(" %c",&c);
    if(c>=65&&c<90)
    {
        printf("\nThe character is upper case");
        c=c+32;
        printf("\nThe equivalent lowercase is%c",c);
    }
    else if(c>97&&c<122)
    {
        printf("\nThe character is lowercase ");
        c=c-32;
        printf("\n The equivalent uppercase is %c",c);
    }
    else
        printf("Invalid character");
    getch();
    return 0;
}
```

WAP to read the values of coefficient a, b, c of a quadratic equations $ax^2+bx+c=0$ and find roots of equations (real or imaginary, complex whether they may be supplied by user)

```
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
    float a,b,c,x1,x2,d,real,img; clrscr();
    printf("Enter the value of a,b,c in  $ax^2+bx+c=0$ ");
    scanf("%f%f%f",&a,&b,&c);
    d=b*b-4*a*c;
    if(d<0)
    {
        printf("Roots are imaginary");
        d=sqrt(fabs(d)); //calculate absolute value
        real=-b/(2*a);
        img=d/(2*a);
        printf("x1=%.2f+i%.2f",real,img);
        printf("x2=%.2f+i%.2f",real,-img);
    }
    else
    {
        printf("The roots are");
        d=sqrt(d);
        x1=(-b+d/(2*a)); x2=(-b-d)/(2*a);
        printf("x1=%.2f\t x2=%.2f",x1,x2);
    }
    getch();
}
```

A bank has decided to provide interest rate in fixed deposit account as: 5% for less than or equal to 2 yrs 6% for greater than 2 yrs and less than equal to 5yrs and 7% for more than 5 yrs . Write a program to read principle, time period from keyboard and calculate that will be after specified period according to policy.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    float p,t,r,i,amount;
    clrscr();
    printf("Enter the value of Principal time period in yrs\t"); scanf("%f
    %f",&p,&t);

    if(t<2)
        r=5;
    else if(t>2&&t<=5)
        r=6;
    else if(t>5)
        r=7;
    else
        r=0;

    i=(p*t*r)/100;
    amount=p+i;
    printf("The amount will be \t%f",amount);
    getch();
}
```

A bank has introduced an incentive policy. A bonus of 2% of the balance is given to everyone, irrespective of their balances and 5% is given to female account holder if their balance is more than rs 5000. Write a program to represent this policy and calculate balance after bonus.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    float balance;
    char gender;
    clrscr();
    printf(" Old balance:lt");
    scanf("%f",&balance);
    printf("Enter gender M/F");
    scanf(" %c",&gender);

    if(gender=='f' || gender=='F')
    {
        if(balance>5000)
            balance=balance+0.05*balance;
        else
            balance=balance+0.02*balance;
    }
    else
        balance=balance+0.02*balance;

    printf("The balance is%f",balance);
    getch();
}
```