Assignment no. 3

QUE 1:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number : ");

    scanf("%d",&n);

    if(n>0)

    printf("\nPositive Number");

    else

    printf("\nNon Positive Number");

}

QUE 2:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number : ");

    scanf("%d",&n);

    if(n%5==0)

    printf("\nNumber is divisible by 5");

    else

    printf("\nNumber is not divisible by 5");

}

QUE 3:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number : ");

    scanf("%d",&n);

    if(n%2==0)

    printf("\nEven Number");

    else

    printf("\nOdd Number");

}

QUE 4:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number here :\n");

    scanf("%d",&n);

    if((n&1)==0)

    printf("Number is even.");

    else

    printf("Number is odd.");

    return 0;

}

QUE 5:

#include<stdio.h>

int main()

{

    int n,count=0;

    printf("Enter a number : ");

    scanf("%d",&n);

    while(n)

    {

        n=n/10;

        count++;

    }

    if(count==3)

    printf("\nIt is a three-digit number.");

    else

    printf("\nIt is not a three-digit number.");

    return 0;

}

QUE 6:

#include<stdio.h>

int main()

{

    int n,m;

    printf("Enter two numbers : ");

    scanf("%d%d",&n,&m);

    if(n>=m)

    printf("\nThe greatest number is %d",n);

    else

    printf("\nThe greatest number is %d",m);

    return 0;

}

QUE 7:

#include<stdio.h>

int main()

{

    // ax^2 + bx + c --quadratic equation

    int a,b,c,d;

    printf("Enter values of a,b and c : ");

    scanf("%d%d%d",&a,&b,&c);

    d=(b\*b-4\*a\*c);

    if(d>0)

    printf("\nRoots are real and distinct");

    else if(d<0)

    printf("\nImaginary roots");

    else

    printf("Roots are real and equal");

}

QUE 8:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a Year : ");

    scanf("%d",&n);

    if((n%4==0 && n%100!=0)|| n%400==0)

    printf("\nLeap Year");

    else

    printf("\nNot a Leap Year");

    return 0;

}

QUE 9:

#include<stdio.h>

int main()

{

    int a,b,c;

    printf("Enter three numbers : ");

    scanf("%d%d%d",&a,&b,&c);

    if(a>b && a>c)

    printf("\nThe greatest number is %d",a);

    else if(b>c)

    printf("\nThe greatest number is %d",b);

    else

    printf("The greatest number is %d",c);

    return 0;

}

OR

#include<stdio.h>

int main()

{

    int a,b,c;

    printf("Enter three numbers : ");

    scanf("%d%d%d",&a,&b,&c);

/\*if(a>b)

       if(a>c)

       printf("\nGreatest is %d",a);

       else

       printf("\nGreatest is %d",c);

    else if(b>c)

       printf("\nGreatest is %d",b);

       else

       printf("\nGreatest is %d",c); \*/

    (a>b)? (a>c)?printf("\nGreatest is %d",a): printf("\nGreatest is %d",c) :(b>c)?printf("\nGreatest is %d",b):printf("\nGreatest is %d",c);

    return 0;

}

QUE 10:

#include<stdio.h>

int main()

{

    float cp,sp,loss,profit;

    printf("Enter the cost price and the selling price of a product : ");

    scanf("%f%f",&cp,&sp);

    if(cp>=sp)

    {

       loss=(cp-sp)\*100/cp;

       printf("Loss percentage is %f%%",loss);

    }

    else

    {

        profit=(sp-cp)\*100/cp;

        printf("Profit percentage is %f%%",profit);

    }

    return 0;

}

QUE 11:

#include<stdio.h>

int main()

{

    int a,b,c,d,e;

    printf("Enter marks of 5 subjects : ");

    scanf("%d%d%d%d%d",&a,&b,&c,&d,&e);

    if(a>=33 && b>=33 && c>=33 && d>=33 && e>=33)

    printf("\nPass");

    else

    printf("\nFail");

       return 0;

}

QUE 12:

#include<stdio.h>

int main()

{

    char n;

    printf("Enter a character : ");

    scanf("%c",&n);

    if('A'<=n && n<='Z')

    printf("\nAlphabet is in uppercase");

    else if('a'<=n && n<='z')

    printf("\nAlphabet is in lowercase");

    return 0;

}

OR

#include<stdio.h>

int main()

{

    char n;

    printf("\nEnter a character : ");

    scanf("%c",&n);

    if(n>=65 && n<=90)

    printf("\nAlphbet is in Uppercase");

    else if(n>=97 && n<=122)

    printf("\nAlphabet is in Lowercase");

}

QUE 13:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number : ");

    scanf("%d",&n);

    if(n%3==0 && n%2==0)

    printf("\nDivisible by 2 and 3 both");

    else if(n%2==0)

    printf("\nDivisible by 2 but not by 3");

    else if(n%3==0)

    printf("\nDivisible by 3 but not by 2");

    else

    printf("\nNot divisible by 2 and 3 both");

    return 0;

}

QUE 14:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number : ");

    scanf("%d",&n);

    if(n%7==0 && n%3==0)

    printf("\nDivisible by 7 and 3 both");

    else if(n%7==0)

    printf("\nDivisible by 7 but not by 3");

    else if(n%3==0)

    printf("\nDivisible by 3 but not by 7");

    else

    printf("\nNot divisible by 7 and 3 both");

    return 0;

}

QUE 15:

#include<stdio.h>

int main()

{

    int n;

    printf("Enter a number : ");

    scanf("%d",&n);

    if(n>0)

    printf("\nPositive");

    else if(n<0)

    printf("\nNegative");

    else

    printf("\nZero");

    return 0;

}

QUE 16:

#include<stdio.h>

int main()

{

    char n;

    printf("\nEnter a character : ");

    scanf("%c",&n);

    if(n>='A' && n<='Z')

    printf("\nIt is an alphbet in uppercase");

    else if(n>='a' && n<='z')

    printf("\nIt is an alphabet in lowercase");

    else if(n>='0' && n<='9')

    printf("\nIt is a digit");

    else

    printf("\nIt is a special character");

    return 0;

}

QUE 17:

#include<stdio.h>

int main()

{

    float a,b,c;

    printf("Enter the sides of a triangle : ");

    scanf("%f%f%f",&a,&b,&c);

    if(a<b+c && b<a+c && c<a+b)

    printf("\nValid Triangle");

    else

    printf("\nInvalid Triangle");

    return 0;

}

QUE 18:

#include<stdio.h>

int main()

{

    int n;

    printf("\nEnter the month number ");

    scanf("%d",&n);

    if(n==1 || n==3 || n==5 || n==7 || n==8 || n==10 || n==12)

    printf("\nThe number of days in this month is 31");

    else if(n==4 || n==6 || n==9 || n==11)

    printf("\nThe number of days in this month is 30");

    else

    printf("\nThe number of days in this month is 28");

    return 0;

}

OR

#include<stdio.h>

int main()

{

    int n;

    printf("\nEnter the month number : ");

    scanf("%d",&n);

    switch(n)

    {

    case 1: printf("The number of days in this month is 31");

            break;

    case 2: printf("The number of days in this month is 28");

            break;

    case 3: printf("The number of days in this month is 31");

            break;

    case 4: printf("The number of days in this month is 30");

            break;

    case 5: printf("The number of days in this month is 31");

            break;

    case 6: printf("The number of days in this month is 30");

            break;

    case 7: printf("The number of days in this month is 31");

            break;

    case 8: printf("The number of days in this month is 31");

            break;

    case 9: printf("The number of days in this month is 30");

            break;

    case 10: printf("The number of days in this month is 31");

             break;

    case 11: printf("The number of days in this month is 30");

             break;

    case 12: printf("The number of days in this month is 31");

             break;

    default : printf("Invalid Input");

    }

    return 0;

}