1.Write a program to check whether a given number is positive or non-positive.

1. #include<stdio.h>
2. int main()
3. {
4. int x,y;
5. printf("Enter a number= ");
6. scanf("%d",&x);
7. if( x>0)
8. printf("Number is +ve");
9. else
10. printf("Number is non +ve");
11. }

2. Write a program to check whether a given number is divisible by 5 or not.

#include<stdio.h>

int main()

{

   int x,y;

   printf("Enter a number= ");

   scanf("%d",&x);

   if( x%5==0)

      printf("Number is divisible by 5");

   else

      printf("Number is not divisible by 5");

}

3. Write a program to check whether a given number is an even number or an odd

number.

#include<stdio.h>

int main()

{

   int x,y;

   printf("Enter a number= ");

   scanf("%d",&x);

   if( x%2==0)

      printf("Even");

   else

      printf("Odd");

}

4.Write a program to check whether a given number is an even number or an odd

number without using % operator.

#include<stdio.h>

int main()

{

   int x,y;

   printf("Enter a number= ");

   scanf("%d",&x);

   if( x & 1)

      printf("odd");

   else

      printf("even");

}

5.Write a program to check whether a given number is a three-digit number or not.

#include<stdio.h>

int main()

{

   int x,y;

   printf("Enter a number= ");

   scanf("%d",&x);

   if( x / 1000==0)

    printf("Three digit");

   else

    printf("Not");

}

6.Write a program to print greater between two numbers. Print one number of both are

the same.

#include<stdio.h>

int main()

{

   int x,y;

   printf("Enter two number= ");

   scanf("%d%d",&x,&y);

   if( x > y )

    printf("%d is greater",x);

   else if(y>x)

    printf("%d is greater", y);

   else

    printf("Both are same") ;

}

7. Write a program to check whether roots of a given quadratic equation are real &

distinct, real & equal or imaginary roots.

#include<stdio.h>

#include<math.h>

int main()

{

   int a,b,c,d;

   printf("Enter co-efficient of x^2, x, and enter constant=");

   scanf("%d%d%d",&a,&b,&c);

   d=sqrt(b\*b-4\*a\*c);

   if(d>0)

     printf("Roots are real and unequal");

   if(d<0)

     printf("Roots are imaginary");

   if(d==0)

     printf("Roots are real and equal");

}

8.Write a program to check whether a given year is a leap year or not.

#include<stdio.h>

#include<math.h>

int main()

{

   int a;

   printf("Enter year=");

   scanf("%d",&a);

   if(a%100==0)

   {

    if(a%4==0)

     printf("Year is leap");

   }

   else

     if(a%4==0)

       printf("leap");

     else

       printf("Not");

}

9.Write a program to find the greatest among three given numbers. Print number once

if the greatest number appears two or three times.

#include<stdio.h>

#include<math.h>

int main()

{

   int a,b,c;

   printf("Enter all three numbers=");

   scanf("%d%d%d",&a,&b,&c);

   if(a>=b && a>=c)

    printf("%d is greatest Number",a);

   if(b>=a && b>=c)

    printf("%d is greatest Number",b);

   if(c>=a && c>=b)

    printf("%d is greatest Number",c);

}

10. Write a program which takes the cost price and selling price of a product from the

user. Now calculate and print profit or loss percentage.

#include<stdio.h>

#include<math.h>

int main()

{

   int a,b,pl;

   printf("Enter cost and selling price=");

   scanf("%d%d",&a,&b);

   pl=b>a?b-a:a-b;

   if(a>b)

    printf("loss");

   if(b>a)

    printf("Profit");

   if(a==b)

    printf("No profit no loss");

   printf(" %d%%",(pl\*100)/a);

}

11. Write a program to take marks of 5 subjects from the user. Assume marks are given

out of 100 and passing marks is 33. Now display whether the candidate passed the

examination or failed.

#include<stdio.h>

#include<math.h>

int main()

{

   int m,p,c,h,e;

   printf("Enter marks of math, phy,chem,hindi and eng=");

   scanf("%d%d%d%d%d",&m,&p,&c,&h,&e);

   if(m>=33 && p>=33 && c>=33 && h>=33 && e>=33)

    printf("Pass");

    else

     printf("Fail");

}