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

Ans. #include<stdio.h>

int main()

{

int a;

printf("Enter any number : ");

scanf("%d",&a);

if(a>0)

printf("Positive Number");

else

printf("Non Positive Number");

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter any number : ");

scanf("%d",&a);

if(a%5==0)

printf("%d is Divisible By 5",a);

else

printf("%d is Not Divisible By 5",a);

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter any number : ");

scanf("%d",&a);

if(a%2==0)

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

else

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

return 0;

}

4 Write a program to check whether a given number is an even number or an odd number without using % operator.

Ans #include<stdio.h>

int main()

{

int a,r;

printf("Enter Any Number");

scanf("%d",&a);

r= a&1;

if(r==1)

printf("The Number is ODD");

else

printf("The Number is EVEN");

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int x;

printf("Enter any number ");

scanf("%d",&x);

if(1000>x>99)

printf("Three Digit Number");

else

printf("Not a Three Digit Number");

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int x,y;

printf("Enter two Numbers :");

scanf("%d%d",&x,&y);

if(x-y<=0)

{

if(x-y==0)

printf("Both are same ,one of them is %d",y);

else

printf("%d is Greater than %d",y,x);

}

else

printf("%d is Greater than %d",x,y);

return 0;

}

7 Write a program to check whether roots of a given quadratic equation are real & distinct, real & equal or imaginary roots

Ans #include<stdio.h>

int main()

{

int a,b,c,d;

printf("Enter Three Roots : ");

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

d=b\*b- 4\*a\*c;

if(d>0)

printf("Roots are real & distinct");

else if(d<0)

printf("Roots are imaginary");

else

printf("Roots are real & equal ");

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter Year");

scanf("%d",&a);

if(a%100==0)

{ if(a%400==0)

printf("%d is Leap Year",a);

else

printf("%d is Not Leap Year",a);

}

else

{

if(a%4==0)

printf("%d is Leap Year",a);

else

printf("%d is Not Leap Year",a);

}

return 0;

}

9 Write a program to find the greatest among three given numbers. Print number once if the greatest number appears two or three times.

Ans. #include<stdio.h>

int main()

{

int a,b,c;

printf("Enter Any Three Number");

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

if(a>b)

{

if(a>c)

printf("%d is Greatest",a);

else

printf("%d is Greatest",c);

}

else

{

if(b>c)

printf("%d is Greatest",b);

else

printf("%d is Greatest",c);

}

return 0;

}

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.

Ans #include<stdio.h>

int main()

{

int cp,sp,profit,loss;

printf("Enter Cost Price : ");

scanf("%d",&cp);

printf("Enter Selling Price : ");

scanf("%d",&sp);

if(sp>cp)

{

profit=(sp-cp)\*100/cp;

printf("Profit is %d parcent",profit);

}

else

{

loss=(cp-sp)\*100/cp;

printf("Loss is %d parcent",loss);

}

return 0;

}

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.

Ans #include<stdio.h>

int main()

{

int a,b,c,d,e;

printf("Enter marks of all five subjects :");

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

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

printf("PASS");

else

printf("FAIL");

return 0;

}

12 Write a program to check whether a given alphabet is in uppercase or lowercase

Ans. #include<stdio.h>

int main()

{

char ch;

printf("Enter Any Alphabet : ");

scanf("%c",&ch);

if(ch>='a' && ch<='z')

printf("%c is Lowercase",ch);

else if(ch>='A' && ch<='Z')

printf("%c is is Uppercase",ch);

else

printf("It not any Alphabet");

return 0;

}

13 Write a program to check whether a given number is divisible by 3 and divisible by 2

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter Any Number: ");

scanf("%d",&a);

if(a%2==0 && a%3==0)

printf("Number is divisible by 3 and divisible by 2 ");

else

printf("Not Divisible");

return 0;

}

14 Write a program to check whether a given number is divisible by 7 or divisible by 3.

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter Any Number: ");

scanf("%d",&a);

if(a%3==0 || a%7==0)

printf("Number is divisible by 7 or divisible by 3 ");

else

printf("Not Divisible");

return 0;

}

15 Write a program to check whether a given number is positive, negative or zero.

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter Any Number: ");

scanf("%d",&a);

if(a>0)

printf("Number is Positive");

else if(a<0)

printf("Number is Negative");

else

printf("Number is Zero");

return 0;

}

16 Write a program to check whether a given character is an alphabet (uppercase), an alphabet (lower case), a digit or a special character.

Ans #include<stdio.h>

int main()

{

char a;

printf("Enter Any Character: ");

scanf("%c",&a);

if(a>='A' && a<='Z')

printf("Uppercase Alphbet");

else if(a>='a' && a<='z')

printf("Lowercase Alphabet");

else if(a>='0' && a<='9')

printf("Digit");

else

printf("Special Character");

return 0;

}

17 Write a program which takes the length of the sides of a triangle as an input. Display whether the triangle is valid or not.

Ans #include<stdio.h>

int main()

{

int a,b,c;

printf("Enter Three Sides of Triangle : ");

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

if(a+b>c && a+c>b && b+c>a)

printf("Triangle is Valid");

else

printf("Triangle is Invalid");

return 0;

}

18 Write a program which takes the month number as an input and display number of days in that month

Ans #include<stdio.h>

int main()

{

int a;

printf("Enter Number of Month : ");

scanf("%d",&a);

if(a==1)

printf("%d no month is 31 days",a);

else if(a==2)

printf("%d no month is 28 days",a);

else if(a==3)

printf("%d no month is 31 days",a);

else if(a==4)

printf("%d no month is 30 days",a);

else if(a==5)

printf("%d no month is 31 days",a);

else if(a==6)

printf("%d no month is 30 days",a);

else if(a==7)

printf("%d no month is 31 days",a);

else if(a==8)

printf("%d no month is 31 days",a);

else if(a==9)

printf("%d no month is 30 days",a);

else if(a==10)

printf("%d no month is 31 days",a);

else if(a==11)

printf("%d no month is 30 days",a);

else if(a==12)

printf("%d no month is 31 days",a);

return 0;

}