ASSIGNMENT 3

------------------------------------------------------------------------------------------------

/\* to check whether a number is positive or non positive \*/

#include<stdio.h>

int main()

{

int a;

printf("Enter a number:");

scanf("%d", &a);

if (a>0)

{

printf("Positive");

}

else

printf("Non Positive");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether given number is divisible by 5 or not \*/

#Include<stdio.h>

int main()

{

int a;

printf("Enter a number:");

scanf("%d", &a);

if(x%5)

{

printf("Divisible by 5");

}

else

printf("Not Divisible by 5");

return 0;

}

------------------------------------------------------------------------------------------------

/\*to check whether a given number is even or odd \*/

#Include<stdio.h>

int main()

{

int a;

printf("Enter a number:");

scanf("%d", &a);

if (a%2)

{

printf("Given number is an even");

}

else

printf("given number is odd");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether a given number is even or odd without using % operator \*/

# Include<stdio.h>

int main()

{

int a;

printf("Enter a number");

scanf(%d", &a);

if ((a&1)==0)

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

else

printf("%dis odd", a);

return 0;

}

------------------------------------------------------------------------------------------------

/\*to check whether a given number is a three digit number or not\*/

#Include<stdio.h>

int main()

{

int a;

printf("Enter a three digit number:");

scanf("%d", &a);

if (a>99)

{

printf("Given number is a three digit number");

}

else

printf("Given number is not a three digit number");

return 0;

}

------------------------------------------------------------------------------------------------

/ \* to print greater between two numbers , print one number of both are same \*/

#include<stdio.h>

int main()

{

int a,b;

printf("Enter two number:");

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

if (a>b)

{

printf ("%d" , &a);

}

if (a<b)

{

printf("%d", &b);

}

else

printf("Both are the same");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether roots of a given quadratic equation are real & distinct, real & equal or emaginary roots \*/

#Include<stdio.h>

int main()

{

float a,b,c,r1,r2,d;

printf("Enter a,b,c value");

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

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

if(d==0)

{

printf("roots are equal & real");

a=-b/(c\*a);

printf("root1=%f and root2=%f", r1,r2);

}

else if(d>0)

{

printf("roots are real & distinct");

}

{

a=(-b+sqrt (d)c\*a)

r2 = (-b- sqrt(d)/c\*a)

printf("root1= %f", r1);

printf("root2= %f", r2);

}

else

{

printf("root are imiganary");

}

------------------------------------------------------------------------------------------------

/\* to check whether a given year is leap year or not \*/

#Include<stdio.h>

int main()

{

int a;

printf("Enter a year");

scanf("%d", &a);

if (a%4)

{

printf("Given no. is leap year");

}

else

printf("Given no. is not a leap year");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to find the gretest among three given numbers. print number once if the greatest number appears two or three timews. \*/

#Include<stdio.h>

int main()

{

int a,b,c :

printf(" Enter three number");

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

if(a>b &&a>c)

{

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

}

if(b>a && b>c)

{

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

}

if(c>a && c>b)

{

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

}

return 0;

}

------------------------------------------------------------------------------------------------/\* take to cost CP and SP of a product from the user . now calculate and print profit and loss in precentage. \*/

#Include<stdio.h>

int main()

{

int SP, CP;

printf("Enter selling prize");

scanf("%d",&SP);

printf("Enter cost prize");

scanf("%d",&CP);

if(CP > SP)

{

printf(" Loss= CP-SP/CP\*100");

}

if(CP<SP)

{

printf(" Profit= SP-CP/CP\*100");

}

return 0;

}

------------------------------------------------------------------------------------------------

/\* to take marks of 5 subject from the user . assume marks are given out of 100 and passing marks is 33.3. now display whether the candidate passed the exam or failed . \*/

#Include<stdio.h>

int main()

{

int x=s1,s2s3,s4,s5:

printf(" Enter the marks obtained by student out of 100:");

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

if (x>33)

{

printf("pass");

}

else

printf("Fail");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether a given alphabet in uppercase or lowercase \*/

#Include<stdio.h>

int main()

{

char x;

printf("Enter a character:");

scanf("%c", &x);

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

{

printf("uppercase Alphabet");

}

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

printf("lowercase Alphabet");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether a given number is divisible by 3 and 2 \*/

#Include<stdio.>

int main()

{

int x;

printf(" Enter a number");

scanf("%d", &x);

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

printf("Divisible by 3 & 2");

else

printf ("Not Divisible by 3&2");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether a given no. is divisible by 7 or 3 \*/

#Include<stdio.h>

int main()

{

int x;

printf("Enter a number");

scanf(" %d", &x);

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

printf("Divisible");

else

printf("Not Divisible");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether a given no. is positive , negative or zero. \*/

#Include<stdio.h>

int main()

{

int a;

printf("Enter a number");

scanf("%d", &a);

if(a>0)

{

printf("Positive");

}

if(a=0)

{

printf("Zero");

}

else

printf("Negative");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to check whether a given character is an alphabet (uppercase), an alphabet(lowercase), a digit or a special character. \*/

#Include<stdio.h>

int main()

{

char x;

printf("Enter a character")

scanf("%c", &x);

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

{

printf("Uppercase Alphabet");

}

else

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

{

printf("Lowercase Alphabet");

}

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

{

printf("Digit");

}

else

printf(" Special Character");

return 0;

}

------------------------------------------------------------------------------------------------

/\* take the length of side of triangle as an input and display whether the triangle is valid or not. \*/

#Include<stdio.h>

int main()

{

int a,b,c;

printf(" Enter length of three sides of triange \n");

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

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

{

printf("it is valid triangle");

}

else

printf(" it is not valid triangle");

return 0;

}

------------------------------------------------------------------------------------------------

/\* to take the month number as an input and display number of days in that month \*/

#Include<stdio.h>

int main()

{

int n;

{

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

{

printf(" 31 days");

}

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

{

printf("30 days");

}

if (n==2)

{

printf(" 28/29 days");

}

else

printf("Invalid month number");

return 0;

}