Assignment-5: Decision Control Statements

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

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

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

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

5. Write a program to check whether the given number is even or odd using a bitwise operator.

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

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

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

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

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

1

#include<stdio.h>

int main(){

/\*int n;

printf("Enter any no.");

scanf("%d",&n);

if(n>0)

printf("Positive number %d",n);

else

printf("Non positive number %d",n);

\*/

int x=10;

++x;

printf("%d",x);

}

2

#include<stdio.h>

int main(){

int n;

printf("Enter any no. ");

scanf("%d",&n);

if(n%5==0){

printf("%d is divisible by 5 ",n);

}

else

{

printf("%d is not divisible by 5 ",n);

}

}

3

#include<stdio.h>

int main(){

int n;

printf("Enter any no. ");

scanf("%d",&n);

if(n%2==0)

printf("%d is even no.",n);

else

printf("%d is odd no.",n);

}

4

#include<stdio.h>

int main(){

int n;

printf("Enter any no.");

scanf("%d",&n);

if(n/2\*2==n)

printf("%d is even no.",n);

else

printf("%d is odd no.",n);

}

5

#include<stdio.h>

int main(){

int n;

printf("Enter any no. ");

scanf("%d" ,&n);

if(n&1==1)

printf("%d is odd no. ",n);

else

printf("%d is even no. ",n);

}

6

#include<stdio.h>

int main(){

int n;

printf("Enter any no.");

scanf("%d",&n);

if(n>=100&&n<=999)

printf("%d is three digit no.",n);

else

printf("%d is not three digit no.",n);

}

7

#include<stdio.h>

int main(){

int a,b;

printf("Enter the first no.");

scanf("%d",&a);

printf("Enter the second no.");

scanf("%d",&b);

printf("\n");

if(a>b)

printf("%d is largest.",a);

else

printf("%d is largest.",b);

}

8

#include<stdio.h>

#include<math.h>

int main(){

int a,b,c;

printf("Enter thevlue of a ");

scanf("%d",&a);

printf("Enter the value of b ");

scanf("%d",&b);

printf("Enter the value of c ");

scanf("%d",&c);

printf("\n");

float r1,r2,d;

if(a==0){

printf("Quadratic equaation is not possible");

}

else{

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

if(d>0){

r1=(-b+sqrt(d))/2\*a;

r2=(-b-sqrt(d))/2\*a;

printf("Roots are r1=%0.2f and r2=%0.2f",r1,r2);

}

else if(d==0){

r1=-b/2\*a;

r2=-b/2\*a;

printf("Roots are r1=%0.2f and r2=%0.2f",r1,r2);

}

else

printf("Roots are imaginery");

}

}

9

#include<stdio.h>

int main(){

int year;

printf("Enter the Year ");

scanf("%d",&year);

if(year%100==0)

if(year%400==0)

printf("%d is leap Year.",year);

else

printf("%d is not leap Year.",year);

else if(year%4==0)

printf("%d is leap year.",year);

else

printf("%d is not leap year.",year);

}

10

#include<stdio.h>

int main(){

int a,b,c;

printf("Enter the value of a:");

scanf("%d",&a);

printf("Enter the value of b:");

scanf("%d",&b);

printf("Enter the value of c:");

scanf("%d",&c);

if(a>b&&a>c)

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

else if(b>c)

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

else

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

}