**C Language Live Community Classes Assignment 7**

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

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number");

scanf("%d",&n);

if(n>0)

{

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

}

else

{

printf("%d is Non-Positive",n);

}

getch();

}

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

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number");

scanf("%d",&n);

if(n%5==0)

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

else

printf("%d is Not Divisible by 5",n);

getch();

}

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

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number");

scanf("%d",&n);

if(n%2==0)

printf("Given Number is Even ");

else

printf("Given Number is Odd ");

getch();

}

1. Write a program to check whether a given number is even or odd without using the modulus operator.

**(METHOD - 1)**

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number");

scanf("%d",&n);

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

printf("Given Number is Even ");

else

printf("Given Number is Odd ");

getch();

}

1. Write a program to check whether a given number is even or odd without using the modulus operator.

**(METHOD - 2)**

**Answer-**

#include<stdio.h>

int main()

{

int n,num;

printf("Enter Any Number");

scanf("%d",&n);

num=n/2;

if(n==2\*num)

printf("Given Number is Even ");

else

printf("Given Number is Odd ");

getch();

}

1. Write a program to check whether a given number is even or odd without using the modulus operator.

**(METHOD - 3)**

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number");

scanf("%d",&n);

if(n & 1==1)

printf("Given Number is ODD ");

else

printf("Given Number is EVEN ");

getch();

}

1. Write a program to check whether a given number is even or odd without using the modulus operator.

**(METHOD - 4)**

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number");

scanf("%d",&n);

if((n>>1)<<1==n)

printf("Given Number is EVEN ");

else

printf("Given Number is ODD ");

getch();

}

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

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number ");

scanf("%d",&n);

if(n>99 && n<1000 || n<-99 && n>-1000)

printf("Given Number is 3 Digit Number ");

else

printf("Given Number is Not a 3 Digit Number ");

getch();

}

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

**Answer-**

#include<stdio.h>

int main()

{

int a,b;

printf("Enter First Number ");

scanf("%d",&a);

printf("Enter Second Number ");

scanf("%d",&b);

if(a>b)

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

else if(b>a)

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

else

printf("Number is Same");

getch();

}

1. 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.

**Answer-**

#include<stdio.h>

int main()

{

float cp,sp,p;

printf("Enter the Cost Price ");

scanf("%g",&cp);

printf("Enter the Selling Price ");

scanf("%g",&sp);

p=sp-cp;

if(sp<cp)

{

printf("LOSS %% =%g",(p/cp)\*100);

}

else

{

printf("PROFIT %% = %g",(p/cp)\*100);

}

getch();

}

1. 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.

**Answer-**

#include<stdio.h>

int main()

{

int sub1,sub2,sub3,sub4,sub5;

printf("Enter the Marks of First Subject ");

scanf("%d",&sub1);

printf("Enter the Marks of Second Subject ");

scanf("%d",&sub2);

printf("Enter the Marks of Third Subject ");

scanf("%d",&sub3);

printf("Enter the Marks of Forth Subject ");

scanf("%d",&sub4);

printf("Enter the Marks of Fifth Subject ");

scanf("%d",&sub5);

if(sub1>=33&&sub2>=33&&sub3>=33&&sub4>=33&&sub5>=33)

printf("YOU ARE PASSED");

else

printf("YOU ARE FAILED");

getch();

}

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

**(METHOD - 1)**

**Answer-**

#include<stdio.h>

int main()

{

char c;

printf("Enter Any Alphabet ");

scanf("%c",&c);

if(c==65||c==66||c==67||c==68||c==69||c==70||c==71||c==72||c==73||c==74||c==75||c==76||c==77||c==78||c==79||c==80||c==81||c==82||c==83||c==84||c==85||c==86||c==87||c==88||c==89||c==90)

{

printf("Alphabet is in UPPERCASE");

}

else if(c==97||c==98||c==99||c==100||c==101||c==102||c==103||c==104||c==105||c==106||c==107||c==108||c==109||c==110||c==111||c==112||c==113||c==114||c==115||c==116||c==117||c==118||c==119||c==120||c==121||c==122)

{

printf("Alphabet is in LOWERCASE");

}

else

{

printf("Please Enter Valid Alphabet");

}

getch();

}

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

**(METHOD - 2)**

**Answer**

#include<stdio.h>

int main()

{

char c;

printf("Enter Any Alphabet ");

scanf("%c",&c);

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

{

printf("Alphabet is in UPPERCASE");

}

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

{

printf("Alphabet is in LOWERCASE");

}

else

{

printf("Please Enter Valid Alphabet");

}

getch();

}

1. A policy agent has to inform about the amount a client will get after maturity of the scheme. If the client comes in the age group 18 to 25 then the policy period is 30 years, if the client comes in the age group 25 to 40 then the policy period is 20 years and if the client comes in the age group 40 to 55 then the policy period is 10 years. Policy is not for other age groups. Clients can invest any amount lesser than or equal to 100000 but must be greater than or equal to 10000. Rate of return is 5% using simple interest. Write a program to take age and investment amount. Print the maturity amount a client will get.

**Answer-**

#include<stdio.h>

int main()

{

int age;

float amount,TotalAmount;

printf("Enter age of Client ");

scanf("%d",&age);

printf("Enter Investment Amount ");

scanf("%g",&amount);

if(age>=18 && age<=25 && amount>=10000 && amount<=100000)

{

TotalAmount=amount\*30;

printf("YOUR MATURITY AMOUNT IS %.2f",TotalAmount+((amount\*5\*30)/100));

}

else if(age>=26 && age<=40 && amount>=10000 && amount<=100000)

{

TotalAmount=amount\*20;

printf("YOUR MATURITY AMOUNT IS %.2f",TotalAmount+((amount\*5\*20)/100));

}

else if(age>=41 && age<=55 && amount>=10000 && amount<=100000)

{

TotalAmount=amount\*10;

printf("YOUR MATURITY AMOUNT IS %.2f",TotalAmount+((amount\*5\*10)/100));

}

else

{

printf("YOU ARE NOT ELEGIBLE FOR THIS POLICY");

}

getch();

}