**C Language Live Community Classes Assignment 6**

1. Write a program to print size of an int, a float, a char and a double type variable

**Answer-**

#include<stdio.h>

int main()

{

int x;

x=sizeof(int);

printf("Size of int is %d \n",x);

x=sizeof(float);

printf("Size of float is %d \n",x);

x=sizeof(char);

printf("Size of char is %d \n",x );

x=sizeof(double);

printf("Size of double is %d \n",x);

getch();

}

1. Write a program to find last digit of a given number

**Answer-**

#include<stdio.h>

int main()

{

int n;

printf("Please enter a number");

scanf("%d",&n);

n=n%10;

printf("Last digit of a number is %d",n);

getch();

}

1. Write a program to find first digit of a given three digit number

**Answer-**

#include<stdio.h>

int main()

{

int n,num;

printf("Please Enter the Three Digit number");

scanf("%d",&n);

num=n/100;

printf("First digit of %d is %d",n,num);

getch();

}

1. Write a program to find middle digit of a given three digit number

**Answer-**

#include<stdio.h>

int main()

{

int n,num;

printf("Please Enter the Three Digit number\n");

scanf("%d",&n);

num=(n/10)%10;

printf("Middle digit of %d is %d",n,num);

getch();

}

1. Write a program to swap values of two int variables

**Answer-**

#include<stdio.h>

int main()

{

int a,b,c;

printf("Please Enter the First number\n");

scanf("%d",&a);

printf("Please Enter the Second number\n");

scanf("%d",&b);

printf("Value of First Number is %d\n",a);

printf("Value of Second Number is %d\n",b);

c=a;

a=b;

b=c;

printf("Value of First Number After Swapping is %d\n",a);

printf("Value of Second Number After Swapping is %d\n",b);

getch();

}

1. Write a program to swap values of two int variables without using third variable

**Answer-**

(**METHOD -1**)

#include<stdio.h>

int main()

{

int a,b;

printf("Please Enter the First number\n");

scanf("%d",&a);

printf("Please Enter the Second number\n");

scanf("%d",&b);

printf("Value of First Number is %d\n",a);

printf("Value of Second Number is %d\n",b);

a=a+b;

b=a-b;

a=a-b;

printf("Value of First Number After Swapping is %d\n",a);

printf("Value of Second Number After Swapping is %d\n",b);

getch();

}

1. Write a program to swap values of two int variables without using third variable

**Answer-**

(**METHOD -2**)

#include<stdio.h>

int main()

{

int a,b;

printf("Please Enter the First number\n");

scanf("%d",&a);

printf("Please Enter the Second number\n");

scanf("%d",&b);

printf("Value of First Number is %d\n",a);

printf("Value of Second Number is %d\n",b);

a=a^b;

b=a^b;

a=a^b;

printf("Value of First Number After Swapping is %d\n",a);

printf("Value of Second Number After Swapping is %d\n",b);

getch();

}

1. Write a program to swap values of two int variables without using third variable

**Answer-**

(**METHOD -3**)

#include<stdio.h>

int main()

{

int a,b;

printf("Please Enter the First number\n");

scanf("%d",&a);

printf("Please Enter the Second number\n");

scanf("%d",&b);

printf("Value of First Number is %d\n",a);

printf("Value of Second Number is %d\n",b);

b=a+b-(a=b);

printf("Value of First Number After Swapping is %d\n",a);

printf("Value of Second Number After Swapping is %d\n",b);

getch();

}

1. Write a program to make the last digit of a number stored in a variable as zero. (Example - if x=2345 then make it x=2340)

**Answer-**

#include<stdio.h>

int main()

{

int n,num;

printf("Enter Any Number\n");

scanf("%d",&n);

num=n/10;

num=num\*10;

printf("%d",num);

getch();

}

1. Write a program to input a number from the user and also input a digit. Append a digit in the number and print the resulting number. (Example - number=234 and digit=9 then the resulting number is 2349)

**Answer-**

#include<stdio.h>

int main()

{

int n,dig;

printf("Enter Any Number\n");

scanf("%d",&n);

printf("Enter Any Digit For Append\n");

scanf("%d",&dig);

n=(n\*10)+dig;

printf("Resulting Number is %d",n);

getch();

}

1. Assume price of 1 USD is INR 76.23. Write a program to take the amount in INR and convert it into USD.

**Answer-**

#include<stdio.h>

int main()

{

float USD,INR;

printf("Enter Indian Rupees\n");

scanf("%g",&INR);

USD=INR/76.23;

printf("%g Indian Rupees = %g US DOLLAR",INR,USD);

getch();

}

1. Write a program to take a three digit number from the user and rotate its digits by one position towards the right.

**Answer-**

#include<stdio.h>

int main()

{

int n,num;

printf("Please Enter Three Digit Number\n");

scanf("%d",&n);

num=n%10;

num=num\*100 + (n/10);

printf("Number After Rotation is %d",num);

getch();

}