**Assignment - 2 A Job Ready Bootcamp in C++, DSA and IOT MySirG**

**Operators in C Language**

**1. Write a program to print unit digit of a given number.**

**Ans-**

#include<stdio.h>

int main()

{

int n;

printf("Enter a Number : ");

scanf("%d",&n);

printf("unit digit of a given number is %d",n%10);

return 0;

}

**2. Write a program to print a given number without its last digit.**

**Ans-**

#include<stdio.h>

int main()

{

int n;

printf("Enter a Number : ");

scanf("%d",&n);

printf("number without its last digit is %d",n/10);

return 0;

}

**3. Write a program to swap values of two int variables.**

**Ans-**

#include<stdio.h>

int main()

{

int a,b,c;

printf("Enter First Number : ");

scanf("%d",&a);

printf("Enter Second Number : ");

scanf("%d",&b);

printf("Number Before Swap is :\n First Number :%d Second Number :%d",a,b);

c=a;

a=b;

b=c;

printf("\nNumber After Swap is :\n First Number :%d Second Number :%d",a,b);

return 0;

}

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

**Ans-**

(**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();

}

(**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();

}

(**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();

}

**5. Write a program to input a three-digit number and display the sum of the digits.**

**Ans-**

#include<stdio.h>

int main()

{

int n;

printf("Please Enter a 3-Digit Number : ");

scanf("%d",&n);

printf("Sum of the Digits of %d = %d",n,n/100+n/10%10+n%10);

return 0;

}

**6. Write a program which takes a character as an input and displays its ASCII code.**

**Ans-**

#include<stdio.h>

int main()

{

char c;

printf("Please Enter Any Character ");

scanf("%c",&c);

printf("ASCII code of %c = %d",c,c);

return 0;

}

**7. Write a program to find the position of first 1 in LSB.**

**Ans-**

#include<stdio.h>

int main()

{

int n,count=1;

printf("Please Enter Any Number ");

scanf("%d",&n);

while(n>0)

{

if(n&1==1)

{

printf("%d Position",count);

break;

}

else

{

n=n>>1;

count++;

}

}

return 0;

}

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

**Ans-**

#include<stdio.h>

int main()

{

int n;

printf("Please Enter Any Number ");

scanf("%d",&n);

if(n&1)

{

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

}

else

{

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

}

return 0;

}

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

**Ans-**

#include<stdio.h>

int main()

{

printf("Size of int =%d ",sizeof(int));

printf("\nSize of float =%d ",sizeof(float));

printf("\nSize of char =%d ",sizeof(char));

printf("\nSize of double =%d ",sizeof(double));

return 0;

}

**10. 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)**

**Ans-**

#include<stdio.h>

int main()

{

int n;

printf("Enter Any Number ");

scanf("%d",&n);

n=(n/10)\*10;

printf("%d",n);

return 0;

}

**11. 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)**

**Ans-**

#include<stdio.h>

int main()

{

int n,num;

printf("Enter Any Number ");

scanf("%d",&n);

printf("Enter a Digit which you add on a unit place ");

scanf("%d",&num);

n=(n\*10)+num;

printf("%d",n);

return 0;

}

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

**Ans-**

#include<stdio.h>

int main()

{

float INR;

printf("Enter INDIAN RUPEES ");

scanf("%g",&INR);

printf("US Dollar= %g",INR/76.23);

return 0;

}

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

**Ans-**

#include<stdio.h>

int main()

{

int n;

printf("Enter any Three Digit Number ");

scanf("%d",&n);

printf("rotate its digits by one position towards the right = %d",(n%100)\*10+n/100);

return 0;

}