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

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

```
Ans:-
#include<stdio.h>
#include<conio.h>
int main()
{
   int x;
   printf("Enter a Number :-");
   scanf("%d",&x);
   printf("Unit digit of %d is =%d ",x,x%10);
   getch();
}
```

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

```
Ans:-
```

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int x;
    printf("Enter a Number :-");
    scanf("%d",&x);
    printf("%d without last digit is =%d ",x,x/10);
    getch();
}
```

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

```
Ans:-
```

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a,b,c;
    printf("Enter Two Number :-");
    scanf("%d%d",&a,&b);
    c=a;
    a=b;
    b=c;
    printf("a=%d ,b=%d",a,b);
    getch();
}
```

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

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a,b;
    printf("Enter Two Number :-");
    scanf("%d%d",&a,&b);
    a=(a+b)-(b=a);
    printf("a=%d ,b=%d",a,b);
    getch();
}
```

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

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
  int a,b,sum=0;
  printf("Enter a Number :-");
  scanf("%d",&a);
  while(a)
    b=a%10;
    sum=sum+b;
    a/=10;
  }
  printf("Sum of digit is =%d",sum);
  getch();
}
6. Write a program which takes a character as an input and displays its ASCII code.
Ans:-
#include<stdio.h>
#include<conio.h>
int main()
{
  char c;
  printf("Enter any character :-");
  scanf("%c",&c);
  printf("ASCII Code of %c is =%d",c,c);
  getch();
}
```

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

```
Ans:-
#include <stdio.h>
#include<conio.h>
int main()
{
  int x,count=1;
  printf("Enter a Number :-");
  scanf("%d",&x);
  while(x)
  {
    if(x%2==1)
    {
      break;
    }
    x/=2;
    count++;
  }
  printf("Position of first 1 in LSB is =%d",count);
}
8. Write a program to check whether the given number is even or odd using a bitwise
operator.
Ans:-
#include<stdio.h>
#include<conio.h>
int main()
{
  int c,a;
```

printf("Enter a number :-");

scanf("%d",&c);

```
a=c^1;
  if(a==c+1)
    printf("Even Number");
  else
    printf("Odd number");
  getch();
}
8. Write a program to print size of an int, a float, a char and a double type variable.
Ans:-
#include<stdio.h>
#include<conio.h>
int main()
{
  int a;
  char c;
  float b;
  double d;
  printf("Size of a int variable=%d\nSize of an char variable is %d\n",sizeof(a),sizeof(c));
  printf("Size of a float is %d\nSize of a double variable is %d",sizeof(b),sizeof(d));
  getch();
}
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>
#include<conio.h>
int main()
{
  int x;
```

```
printf("Enter a number:-");
scanf("%d",&x);
x=x-(x%10);
printf("%d",x);
getch();
}
```

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>
#include<conio.h>
int main()
{
    int x,y;
    printf("Enter a number And enter a digit:-");
    scanf("%d%d",&x,&y);
    printf("The resulting number is %d",x*10+y);
    getch();
}
```

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>
#include<conio.h>
int main()
{
    float x;
    printf("Enter the amount in INR:-");
```

```
scanf("%f",&x);
printf("%.2f INR is = %.2f USD",x,x/76.23);
getch();
}
```

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>
#include<conio.h>
int main()
{
    int x,y;
    printf("Enter a three-digit number :-");
    scanf("%d",&x);
    y=(x/10)+100*(x%10);
    printf("After rotate the number %d by one position toward the right =%d",x,y);
    getch();
}
```