Assignment-2

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

```
#include<stdio.h>
int main()
{
    int x = 456;
    int result = x%10;
    printf("Unit digit of %d is %d", x, result);
    return 0;
}
```

output: Unit digit of 456 is 6

(2) WAP to print a given number without its last digit.

```
#include<stdio.h>
int main()
{
    int x = 456;
    int result = x / 10;
    printf("%d", result);
    return 0;
}
```

output: 45

(3) WAP to swap values of two int variables.

```
#include<stdio.h>
int main()
{
    int a=2, b=3, temp;
    printf("Numbers are: %d %d", a, b);
    temp = a;
    a = b;
    b = temp;
    printf("After swapped.\n");
    printf("%d %d", a, b);
    return 0;
}
```

output: Numbers are: 2 3
After swapped
3 2

(4) WAP to swap values of two int variables without using third variable.

```
#include<stdio.h>
int main()
{
    int a=2, b=3;
    printf("%d %d\n", a, b);
    a = a+b;
    b = a-b;
    a = a-b;
    printf("%d %d", a, b);
    return 0;
}
```

output: 2 3
3 2

⑤ WAP to input a 3-digit number and display the sum of digits;

```
#include<stdio.h>
int main()
{
  int sum=0, x=123, y;
  y=x%10;
  x=x/10;
  sum=sum+y;
  y=x%10;
  x=x/10;
  sum=sum+y;
  y=x%10;
  x=x/10;
  sum=sum+y;
  printf("%d", sum);
  return 0;
}
```

Output: 6

⑥ WAP which takes a character as an input and displays its ASCII code.

```
#include<stdio.h>
int main()
{
  char c='A';
  printf("ASCII code of given character %c is %d", c, c);
  return 0;
}
```

Output: ASCII code of given character A is 65

⑦ WAP to find the position of first 1 is LSB.

```
#include<stdio.h>
int main()
{
  int x=12, count=0;
  int result=0;
  while(x!=0)
  {
    result=x&1;
    count++;
    if(result==1)
    {
      printf("\nThe position of 1 in LSB is %d", count);
      break;
    }
```

```
else
{
  x=x>>1;
}
}return 0;
}
```

output: The position of 1 in LSB is 3

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

```
#include<stdio.h>
int main()
{
  int x=13;
  int result;
  result = x&1;
  if(result==1)
     printf("odd");
  else
     printf("even");
  return 0;
}
```

output: odd

⑨ WAP to print size of an int, a float, a char and a double type variable

```
#include<stdio.h>
int main()
{
  printf("%d", sizeof(int));
  printf("\n%d", sizeof(float));
  printf("\n%d", sizeof(char));
  printf("\n%d", sizeof(double));
  return 0;
}
```

output: 4
4
1
8

⑩ WAP to make the last digit of a number stored in a variable as zero.

```
#include<stdio.h>
int main()
{
  int x=2345, temp;
  temp = x/10;
  x = temp*10;
  printf("%d", x);
  return 0;
}
```

output: 2340

(11) WAP to input a number from the user and also input a digit. Append digit in the number and print the resulting number.

```
#include<stdio.h>
int main()
{
 int num, digit;
 printf("Enter a number: ");
 scanf("%d",&num);
 printf("\n Enter a digit to append on given above number :");
 scanf("%d",&digit);
 num = num*10;
  int sum = num + digit;
  printf("\n The number is %d", sum);
  return 0;
}
```

Output: Enter a number : 234
Enter a digit to append on given above number : 5"
The number is 2345

(12) Assume price of 1 USDollar is INR 76.23. WAP to take the amount in INR and convert it into USD.

```
#include<stdio.h>
int main()
{
 int rupees;
 printf("Enter Amount in INR currency : ");
 scanf("%d",&rupees);
 float dollar = rupees/76.23;
 printf("The given amount converted into US Dollar %f",
                                          dollar);
 return 0;

}
```

(13) WAP to ~~make~~ take a 3-digit number from the user and rotate its digits by one position towards the right.

```
#include<stdio.h>
int main()
{
 int x, temp;
 printf("Enter a 3digit number: ");
 scanf("%d",&x);
 temp = x%10;
 x = x/10;
 temp = temp*100;
int sum = temp+x;
printf("\n Rotated number
          is %d", sum);
return 0;
}
```