

Assignment - 2

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

Ans

```
int main()
{
    int x, y;
    printf("enter a number");
    scanf("%d", &x);
    y = x % 10;
    printf("unit digit of given no. is %d", y);
}
```

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

Ans

```
int main()
{
    int x, y;
    printf("enter a number");
    scanf("%d", &x);
    y = x / 10;
    printf("unit digit of given no. ");
    printf("Number without its last digit is %d", y);
}
```

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

Ans

```
int main()
{
    int a, b, c;
    printf("enter first number");
    scanf("%d", &a);
```

```
printf("enter second number");  
scanf("%d", &b);
```

```
c = a;
```

```
a = b;
```

```
b = c;
```

```
printf("After swapping first number is %d", a);  
printf("after swapping second number is %d", b);
```

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

Ans

```
int main()
```

```
{ int a=10, b=20;
```

```
printf("before swap a=%d, b=%d", a, b);
```

```
a = a + b; // = 30 (10+20)
```

```
b = a - b; // = 10 (30-20)
```

```
a = a - b; // = 20 (30-10)
```

```
printf("After swap a=%d, b=%d", a, b);
```

- ⑥ Write a program which takes a character as an input and display its ASCII code.

Ans

```
int main()
```

```
{ int char, c;
```



```
printf("enter a character");
```

```
scanf("%c", &c);
```

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

```
}
```

⑧

Write a program to check whether a given number is even or odd using bitwise operators.

Ans

```
int main()
```

```
{ int x;
```

```
    printf("enter a number");
```

```
    scanf("%d", &x);
```

```
    if (x & 1 == 1)
```

```
        printf("odd");
```

```
    else if (x & 1 == 0)
```

```
        printf("even");
```

```
}
```

⑨

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

Ans

```
int main()
```

```
{ int a;
```

```
  char b;
```

```
  double c;
```

```
  float d;
```

```
printf("Size of char: is %d bytes\n", sizeof(b));
```

```
printf("Size of int: is %d bytes\n", sizeof(a));
```

```
printf("Size of double: is %d bytes\n", sizeof(c));
```

```
printf("Size of float is: %d bytes\n", sizeof(d));
```

```
}
```

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

Ans

```
int main()
{
    int x, y;
    printf("enter a number");
    scanf("%d", &x);

    printf("Add one digit to the number");
    scanf("%d %d", &x, &y);
}
```

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

```
int main()
{
    int a, b, c, d;

    printf("enter three digit number");
    scanf("%d", &a);

    b = a % 10;
    c = a / 10;
    d = b * 100 + c;

    printf("after rotate its digit by one position - %d", d);
}
```


- ⑤ Write a program to take three digit no. and displays the sum of the digits.

Ans-

```
int main()
{
    int a, b, c, d, E, x;
    printf("enter three Digit no.");
    scanf("%d", &x);
```

$$a = x \% 10; \quad // \quad = 3$$

$$b = x / 10; \quad // \quad = 12$$

$$c = b / 10; \quad // \quad = 1$$

$$d = b \% 10; \quad // \quad = 2$$

```
    E = a + c + d;
}
```

```
printf("sum of three digit no. is %d", E);
```

- ⑩ Write a program to make the last digit of a number stored in a variable as zero.

[2345 make it 2340]

```
int main()
{
    int x, y, z;
    printf("enter a number");
    scanf("%d", &x);
```

$$y = x / 10;$$

$$z = 0;$$

```
printf("make it zero last Digit of a  
number %d %d", a, b);
```

- (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

```
int main()
{
    int x;
    float y; printf("enter a number");
    scanf("%d", &x);

    y = x * 1 / 76.25;

    printf("%d INR is %.2f USD", x, y);
}
```

- (7) Write a program to find the position of first 1 in LBS.

Ans

```
int main()
{
    int x = ?, count = 0;
    int result = 0;

    while (x != 0)
    {
        result = x & 1;
        count++;
        if (result == 1)
        {
            printf("%d", count);
        }
    }
}
```



```
    break ;  
}  
    x = x >> 1 ;  
}  
return 10 ;
```