

of $n1$) is assigned to $n2$. This completes the swapping process.

```
#include <stdio.h>
```

```
void main() {
```

```
    int n1, n2;
```

```
    n1 = 40;
```

```
    n2 = 10;
```

```
    // Swapping
```

```
    n1 = n1 - n2; // n1 = 40 - 10 so n1 = 30
```

```
    n2 = n1 + n2; // n2 = 30 + 10 so n2 = 40
```

```
    n1 = n2 - n1; // n1 = 40 - 30 so n1 = 10
```

```
    printf("\n After Swapping, n1 Number = %d", n1);
```

```
    printf("\n After Swapping, n2 Number = %d", n2);
```

```
}
```

```
After Swapping, n1 Number = 10
```

```
After Swapping, n2 Number = 40
```

⑥ Write a Program to find the Largest of three numbers

```
#include <stdio.h>
```

```
void main() {
```

```
    int n1, n2, n3, largest;
```

```
    printf("Enter three different numbers:");
```

```
    scanf("%d %d %d", &n1, &n2, &n3);
```

```
    if (n1 > n2)
```

```
        largest = n1;
```

```
    else
```

```
        largest = n2;
```

```
    if (n3 > largest)
```

```

    largest = n3;
    printf("Largest number is %d", largest);
}
Enter three numbers: 30 20 40
Largest number is 40

```

⑦ Write a Program to check whether a integer number is even or odd.

```

#include <stdio.h>
void main() {
    int num;
    printf("Enter a number");
    else
        printf("odd number");
}

```

Enter a number: 12

Even number

Enter a number: 11

odd number

⑧ Write a Program to display table of any integer number.

```

#include <stdio.h>
void main() {
    int n, i;

```

```

    printf("Enter an integer:");

```

```

    scanf("%d", &n);

```

```

    for(i = 1; i <= 10; ++i) {

```

```

        printf("%d * %d = %d\n", n, i, n * i);

```

```

    }

```

```

}

```

Enter an integer: 9

$$9^* 1 = 9$$

$$9^* 2 = 18$$

$$9^* 3 = 27$$

$$9^* 4 = 36$$

$$9^* 5 = 45$$

$$9^* 6 = 54$$

$$9^* 7 = 63$$

$$9^* 8 = 72$$

$$9^* 9 = 81$$

$$9^* 10 = 90$$

⑨ Write a program to display first ten terms of the Fibonacci Sequence.

The Fibonacci Sequence: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

The Fibonacci Sequence is a sequence where the next term is the sum of the previous two terms.

The first two terms of the Fibonacci Sequence are 0 followed by 1.

```
#include <stdio.h>
```

```
void main() {
```

```
    int i, n, t1 = 0, t2 = 1, next Term;
```

```
    printf("Enter the number of terms: ");
```

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

```
    printf("Fibonacci Series: ");
```

```
    for(i = 1; i <= n; ++i) {
```

```
        printf("%d, ", t1);
```

```
        next Term = t1 + t2;
```

```

t1 = t2;
t2 = next Term;
}
}

```

Enter the number of terms : 10
 Fibonacci series : 0, 1, 1, 2, 3, 5, 8, 13, 21, 34,

⑩ write a Program to calculate the sum of digits of an integer number.

```

#include <stdio.h>
void main() {
    int n, sum = 0, digit;
    printf("Enter an integer :");
    scanf("%d", &n);
    while (n != 0) {
        digit = n % 10;
        sum = sum + digit;
        n = n / 10;
    }
    printf("Sum of the digits = %d", sum);
}

```

Enter an integer : 142
 Sum of the digits = 7

This Program takes an integer input from the user 142. The while loop is used until $n \neq 0$ is false. In each iteration of the loop, each digit (using $\text{digit} = n \% 10$) when n is divided by 10 is calculated and the value of n is reduced by 10 times ($n = n / 10$) inside the loop, the sum of

Q1) write a Program to reverse an integer number using digits of an integer number is computed using
 $Sum = Sum + digit$

Q2) write a Program to reverse an integer number.

```
#include <stdio.h>
void main () {
    int n, rev = 0, digit;
    printf ("Enter an integer:");
    scanf ("%d", &n);
    while (n != 0) {
        digit = n % 10;
        rev = rev * 10 + digit;
        n = n / 10;
    }
    printf ("Reversed number = %d", rev);
}
```

Enter an integer : 345

Reversed number = 543

This Program takes an integer input from the user 345. The while loop is used until $n \neq 0$ is false. In each iteration of the loop, the digit ($digit = n \% 10$), when n is divided by 10 is calculated and the value of n is reduced by 10 times ($n = n / 10$). Inside the loop, the reversed number is computed using: $rev = rev * 10 + digit$

⑫ write a Program to calculate factors of a positive integer.

```
#include <stdio.h>
```

```
void main() {
```

```
    int sum, i;
```

```
    printf("Enter a positive integer;");
```

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

```
    printf("Factors of %d are:", sum);
```

```
    for(i = 1; i <= sum; ++i) {
```

```
        if (sum % i == 0) {
```

```
            printf("%d", i);
```

```
        }
```

```
    }
```

```
}
```

Enter a positive integer: 10

Factors of 10 are: 1 2 5 10

(12) Elaborate the process and elements of communication in detail through suitable examples.

- Sender: He is the person who sends his ideas to another person
- Message: The idea, feeling, suggestion, guidelines, order or any content which is intended to be communicated is message
- Encoding:
- Media:
- Decoding:
- Receiver:
- Feedback:
- Noise: