

26/11/2025

- 1) write a program for sum of digits using functions in arguments without return type.

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

```
void sum_of_digits (int num)
```

```
{
```

```
    int sum = 0, digit;
```

```
    while (num > 0)
```

```
{
```

```
        digit = num % 10;
```

```
        sum += digit;
```

```
        num = num / 10;
```

```
}
```

```
    printf ("sum of digits = %d\n", sum);
```

```
}
```

```
int main()
```

```
{
```

```
    int number;
```

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

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

```
    sum_of_digits (number);
```

```
    return 0;
```

```
}
```

2) write a program to reverse a given number using function with arguments with return type.

```
#include <stdio.h>

int reverse_number (int num)
{
    int rev = 0, rem;
    while (num != 0)
    {
        rem = num % 10;
        rev = rev * 10 + rem;
        num = num / 10;
    }
    return rev;
}

int main()
{
    int n, result;
    printf ("enter a number : ");
    scanf ("%d", &n);
    result = reverse_number (n);
    printf ("Reversed number = %d", result);
    return 0;
}
```

output :

Enter a number : 1234

Reversed number = 4321

3) write a program to swap two numbers without using third variable in without argument with return type.

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

```
int swap()
```

```
{
```

```
    int a,b;
```

```
    printf ("enter two numbers : ");
```

```
    scanf ("%d %d", &a, &b);
```

```
// swapping without third variable
```

```
    a = a+b;
```

```
    b = a-b;
```

```
    a = a-b;
```

```
    printf ("After swapping :\n");
```

```
    printf ("a=%d\n", a);
```

```
    printf ("b=%d\n", b);
```

```
    return 0; // return type is int
```

```
}
```

```
int main()
```

```
{
```

```
    swap(); // function call
```

```
    return 0;
```

```
}
```

out put :

enter two numbers : 10 20

After swapping :

a=20

b=10