

26/11/2025

- 1) write a program to sum of digits using functions in C with 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