

Q1. write a c program to print sum of digits. Using functions.

Ans:-

```
#include <stdio.h>

int sum of digits(int n);

int main () {
    int number, sum;
    printf ("enter any number to find the
            sum of its digits: ");
    scanf ("%d", &number);
    sum = sum of digits (number);
    printf ("sum of digits of %d = %d\n", num, sum)
    return 0;
}

int sum of digits(int n) {
    int sum = 0;
    int remainder;
    while (n != 0) {
        remainder = n % 10;
        sum + = remainder;
        n / = 10;
    }
    return sum;
}
```

Output:-

Enter any number to find sum of its digits: 234

Sum of digits of 234 = 9.

2. write a c program to reverse given number using function.

Ans:-

```
#include <stdio.h>

int reverse_number (int num);

int main () {
    int number, reversed = 0;
    printf ("enter a number to reverse:");
    scanf ("%d", &number);
    reversed = reverse_number (number);
    printf ("reversed number : %.d\n", reversed);
    return 0;
}
```

```
int reverse_number (int num) {
    int reverse = 0, remainder;
    while (num != 0) {
        remainder = num % 10;
        reverse = reverse * 10 + remainder;
        num /= 10;
    }
    return reverse;
}
```

Output:- Enter a number to reverse: 262

Reversed number: 262

3. Write a C program swap two numbers without using third variable.

```
Ans:- #include <stdio.h>

int main() {
    int a,b;
    printf("enter two numbers (a and b):");
    scanf("%d%d", &a, &b);
    printf("Before swap: a=%d, b=%d\n", a, b);

    a = a+b;
    b = a-b;
    a = a-b;

    printf("After swap: a=%d, b=%d\n", a, b);
    return 0;
}
```

Output:-

Enter two numbers (a and b) :- 10 20

Before swap : a=10, b=20

After swap : a=20, b=10