

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;
}
```

Out Put:-

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;
}
```

out Put:- 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;
```

```
}
```

out Put:-

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

Before swap : a = 10, b = 20

After swap : a = 20, b = 10