

Q) Write a C program to print sum of digits, using functions

```
#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 (%d)", 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.

```
#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.

```
#include <stdio.h>
int main(){
    int a,b;
    printf("enter two number (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