

26-11-2021

## Assignment-5

1.) 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 sum of its  
           digits: ");
```

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

```
    sum = sum of digits (number);
```

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

```
}
```



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 (int num);

int main () {

int number, reversed = 0;

printf ("Enter a number to reverse: ");

scanf ("%d", & number);

reversed = reverse (number);

printf ("Reversed number is: %d\n", reversed);  
return 0;

}

int reverse (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;

c = 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.