

1) write a C program to print sum of digits

Input: 1234

out put: 9

```
#include <stdio.h>
```

```
int main() {
```

```
    int num, sum = 0, rem;
```

```
    printf("Enter a number:");
```

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

```
    while (num != 0) {
```

```
        rem = num % 10;
```

```
        sum = sum + rem;
```

```
        num = num / 10;
```

```
    }
```

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

```
    return 0;
```

```
}
```

2) write a C program to reverse a given number.

Input: 123

out put: 321

```
#include <stdio.h>
```

```
int main() {
```

```
    int num, rev = 0, rem;
```

```
    printf("Enter a number:");
```

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

```
    while (num != 0) {
```



```

    }
    printf ("Reversed number = %d\n", rev);
    return 0;
}

```

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

```

#include <stdio.h>

int main() {
    int a, b;
    printf ("Enter two numbers: ");
    scanf ("%d", &a, &b);
    printf ("Before swapping: a=%d, b=%d\n", a, b);
    a = a + b;
    b = a - b;
    a = a - b;
    printf ("After swapping: a=%d, b=%d\n", a, b);
    return 0;
}

```

### Array;

- \* Array is a collection of similar data type homogeneous items
- \* Array allocates contiguous memory allocation

Syntax of array:

```
int main () {
```

```
    int arr[5] = {10, 20};
```

```
    int i;
```

```
    for (i=0; i<5; i++) {
```

```
        scanf ("%d", &arr[i]);
```

```
        arr[u] = 500;
```

```
    for (i=0; i<5; i++) {
```

```
        printf ("%d\t", arr[i]);
```

```
    }
```