

1)Write a c program to print sum of two digits using functions.

```
#include <stdio.h>

// Function to calculate sum of digits
int sumOfDigits(int num) {
    int sum = 0;
    while (num != 0) {
        sum += num % 10;
        num /= 10;
    }
    return sum;
}

int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    printf("Sum of digits: %d\n", sumOfDigits(num));
    return 0;
}
```

Output:

Enter a number:123

Sum of digits :6

2)Write a c-program to reverse a number using functions

```
#include <stdio.h>

// Function to reverse a number
int reverseNumber(int num) {
    int rev = 0;
    while (num != 0) {
        rev = rev * 10 + num % 10;
        num /= 10;
    }
    return rev;
}
```

```
int main() {
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    printf("Reversed number: %d\n", reverseNumber(num));
    return 0;
}
```

Output:

Enter a number:123

Reversed number:321

3)Write a c-program to swap two numbers without using third variable

```
#include <stdio.h>

// Function to swap two numbers
void swapNumbers(int *a, int *b) {
    *a = *a + *b; // a = a + b
    *b = *a - *b; // b = a + b - b = a
    *a = *a - *b; // a = a + b - a = b
}

int main() {
    int num1, num2;
    printf("Enter two numbers: ");
    scanf("%d %d", &num1, &num2);
    printf("Before swap: num1 = %d, num2 = %d\n", num1, num2);
    swapNumbers(&num1, &num2);
    printf("After swap: num1 = %d, num2 = %d\n", num1, num2);
    return 0;
}
```

Output:

Enter two numbers: 5 10

Before swap: num1 = 5, num2 = 10

After swap: num1 = 10, num2 = 5