```c
/*WAP to check whether the person can vote or not using function with the
argument and no return type.*/
#include <stdio.h>

// Function to check whether a person can vote or not
void checkVote(int);

int main()
{
    int age;

    // Prompt the user to enter their age
    printf("Enter your age: ");
    scanf("%d", &age);

    // Call the function to check eligibility to vote
    checkVote(age);

    return 0;
}

// Function to check whether a person can vote or not
void checkVote(int age)
{
    // Check the eligibility based on age
    if (age >= 18)
    {
        printf("You are eligible to vote.\n");
    }
    else
    {
        printf("You are not eligible to vote.\n");
    }
}

```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task12
$ ./question1
Enter your age: 19
You are eligible to vote.

manish@fedora: ~/vs-code/bca-programming-repo/C/task12
$ ./question1
Enter your age: 12
You are not eligible to vote.

manish@fedora: ~/vs-code/bca-programming-repo/C/task12
```

```c
// WAP to find the sum of natural numbers using recursion.
#include <stdio.h>
// Function to find the sum of natural numbers using recursion
int naturalSum(int);

int main()
{
    int n;

    // Prompt the user to enter a number
    printf("Enter a number: ");
    scanf("%d", &n);

    // Display the sum of first n natural numbers
    printf("The sum of the first %d natural numbers is %d\n", n, naturalSum(n));

    return 0;
}

// Recursive function to find the sum of natural numbers
int naturalSum(int n)
{
    if (n == 0)
    {
        return 0;
    }
    else
    {
        return n + naturalSum(n - 1);
    }
}

```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task12
$ ./question2
Enter a number: 10
The sum of the first 10 natural numbers is 55

manish@fedora: ~/vs-code/bca-programming-repo/C/task12
$
```

```c
// WAP to swap two numbers using call by value method.
#include <stdio.h>

// Function prototype for swapping two numbers
void swap(int a, int b);

int main()
{
    int a, b;

    // Prompt the user to enter two numbers
    printf("Enter two numbers: ");
    scanf("%d %d", &a, &b);

    // Call the swap function to swap the numbers
    swap(a, b);

    // Display the original values of a and b (not swapped)
    printf("Original values:\na = %d b = %d\n", a, b);

    return 0;
}

// Function to swap two numbers (call by value method)
void swap(int a, int b)
{
    // Swap the values of a and b
    int temp = a;
    a = b;
    b = temp;

    // Display the values after swapping
    printf("Values after swapping:\na = %d b = %d\n", a, b);
}

```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task12
$ ./question3
Enter two numbers: 3 5
Values after swapping:
a = 5 b = 3
Original values:
a = 3 b = 5
```

```c
// WAP to swap two numbers using call by reference method.
#include <stdio.h>

// Function prototype for swapping two numbers
void swap(int *a, int *b);

int main()
{
    int a, b;

    // Prompt the user to enter two numbers
    printf("Enter two numbers: ");
    scanf("%d %d", &a, &b);

    // Call the swap function to swap the numbers
    swap(&a, &b);

    // Display the original values of a and b (not swapped)
    printf("Original values:\na = %d b = %d\n", a, b);

    return 0;
}

// Function to swap two numbers (call by reference method)
void swap(int *a, int *b)
{
    // Swap the values of a and b using pointers
    int temp = *a;
    *a = *b;
    *b = temp;

    // Display the values after swapping
    printf("Values after swapping:\na = %d b = %d\n", *a, *b);
}

```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task12
$ ./question4
Enter two numbers: 2 3
Values after swapping:
a = 3 b = 2
Original values:
a = 3 b = 2
```