



C++ Exercises



1. Write a function that takes two integers as input and returns their sum.
2. Write a function that takes two floating-point numbers as input and returns their average.
3. Write a function that takes a string as input and returns the length of the string.
4. Write a function that takes an integer as input and returns true if the integer is even and false otherwise.
5. Write a function that takes a character as input and returns true if the character is a vowel and false otherwise.
6. Write a function that takes two integers as input and returns true if the first integer is divisible by the second integer and false otherwise.
7. Write a function that takes a string as input and returns true if the string is a palindrome and false otherwise.
8. Write a function that takes an array of integers as input and returns the sum of all the integers in the array.
9. Write a function that takes an array of integers as input and returns the largest integer in the array.
10. Write a function that takes an array of integers as input and returns the smallest integer in the array.



C++ Exercises and Solution



1. Write a function that takes two integers as input and returns their sum.

```
int sum(int a, int b) {  
    return a + b;  
}
```

2. Write a function that takes two floating-point numbers as input and returns their average.

```
int strLength(string str) {  
    int len = 0;  
    while (str[len] != '\0') {  
        len++;  
    }  
    return len;  
}
```

3. Write a function that takes a string as input and returns the length of the string.

```
bool isEven(int num) {  
    if (num % 2 == 0) {  
        return true;  
    } else {  
        return false;  
    }  
}
```

4. Write a function that takes an integer as input and returns true if the integer is even and false otherwise.

```
int arraySum(int arr[], int size) {  
    int sum = 0;  
    for (int i = 0; i < size; i++) {  
        sum += arr[i];  
    }  
}
```

```
}  
return sum;  
}
```

5. Write a function that takes a character as input and returns true if the character is a vowel and false otherwise.

```
bool isPalindrome(string str) {  
    int len = str.length();  
    for (int i = 0; i < len / 2; i++) {  
        if (str[i] != str[len - i - 1]) {  
            return false;  
        }  
    }  
    return true;  
}
```

6. Write a function that takes two integers as input and returns true if the first integer is divisible by the second integer and false otherwise.

```
int factorial(int num) {  
    int result = 1;  
    for (int i = 1; i <= num; i++) {  
        result *= i;  
    }  
    return result;  
}
```

7. Write a function that takes a string as input and returns true if the string is a palindrome and false otherwise.

```
bool isPrime(int num) {  
    if (num <= 1) {  
        return false;  
    }  
    for (int i = 2; i <= sqrt(num); i++) {  
        if (num % i == 0) {  
            return false;  
        }  
    }  
    return true;  
}
```

```
    }  
    }  
    return true;  
}
```

8. Write a function that takes an array of integers as input and returns the sum of all the integers in the array.

```
int max(int a, int b) {  
    if (a > b) {  
        return a;  
    } else {  
        return b;  
    }  
}
```

9. Write a function that takes an array of integers as input and returns the largest integer in the array.

```
void multiplicationTable(int num) {  
    for (int i = 1; i <= 10; i++) {  
        cout << num << " x " << i << " = " << num * i << endl;  
    }  
}
```

10. Write a function that takes an array of integers as input and returns the smallest integer in the array.

```
string toBinary(int num) {  
    string binary = "";  
    while (num > 0) {  
        if (num % 2 == 0) {  
            binary = "0" + binary;  
        } else {  
            binary = "1" + binary;  
        }  
        num /= 2;  
    }  
    return binary;  
}
```