**A. ES6 function returns:**

**Snippet 1:**

const add = (a, b) => {

return a + b;

};

const result1 = add(3, 4);

// Question 1: What is the value of the result1?

console.log(result1); // Output: 7

**Snippet 2:**

const greet = (name) => {

return { name };

};

const message = greet("Alice");

// Question 2: What is the value of the message?

console.log(message); // Output: { name: "Alice" }

**Snippet 3:**

const calculateArea = (radius) => {

const PI = 3.14159;

const area = PI \* radius \* radius;

return area;

};

const area = calculateArea(5);

// Question 3: What is the value of area?

console.log(area); // Output: 78.53975

**Snippet 4:**

const multiply = (a, b) => a \* b;

const result2 = multiply(2, 5);

// Question 4: What is the value of the result2?

console.log(result2); // Output: 10

**Snippet 5:**

const isEven = (num) => {

if (num % 2 === 0) {

return true;

} else {

return false;

}

};

const evenNumber = isEven(8);

// Question 5: What is the value of evenNumber?

console.log(evenNumber); // Output: true

**Snippet 6:**

const sayHello = () => {

return "Hello!";

};

const hello = sayHello();

// Question 6: What is the value of hello?

console.log(hello); // Output: "Hello!"

**Snippet 7:**

const calculateSquare = (num) => num \* num;

const squaredNumber = calculateSquare(4);

// Question 7: What is the value of squaredNumber?

console.log(squaredNumber); // Output: 16

**Snippet 8:**

const divide = (a, b) => {

if (b === 0) {

return "Error: Division by zero.";

}

return a / b;

};

const result3 = divide(10, 2);

const result4 = divide(8, 0);

// Question 8: What are the values of result3 and result4?

console.log(result3); // Output: 5

console.log(result4); // Output: "Error: Division by zero."

**B. Anonymous functions**

File: anonymous\_functions.js

**Task:1**

const sum = (a, b) => a + b;

console.log(sum(3, 5)); // Output: 8

**Task:2**

const numbers = [1, 2, 3, 4, 5];

const squaredNumbers = numbers.map((num) => num \* num);

console.log(squaredNumbers); // Output: [1, 4, 9, 16, 25]

**C. JavaScript arrow function**

// Step 1: Create the calculateSquare arrow function

const calculateSquare = (number) => number \* number;

// Step 2 & 3: Call the `calculateSquare` function with numbers: 5, 8, and 12 and Stored the results in separate variables.

const square1 = calculateSquare(5);

const square2 = calculateSquare(8);

const square3 = calculateSquare(12);

// Step 4: Print the results to the console

console.log(square1); // Output: 25

console.log(square2); // Output: 64

console.log(square3); // Output: 144