JS Selection Statement & Loops- Practice Questions

1. Determine If a User Can Vote

Question:

Write a function canVote that takes an age and checks if the person is eligible to vote (age >= 18).

Input:

```
console.log(canVote(20));
console.log(canVote(15));
```

Expected Output:

```
"Eligible to vote"
"Not eligible to vote"
```

2. Check If a Number is Positive, Negative, or Zero

Question:

Write a function that checks whether a given number is positive, negative, or zero.

Input:

```
checkNumber(5);
checkNumber(-3);
checkNumber(0);
```

Expected Output:

```
"Positive"

"Negative"

"Zero"
```

3. Find the Largest of Three Numbers

Question:

Write a function that takes three numbers and returns the largest one.

Input:

```
console.log(findLargest(4, 9, 2));
```

Expected Output:

9

4. Display Day of the Week (Switch Case)

Question:

Write a function that takes a number (1-7) and returns the corresponding day of the week using switch.

Input:

```
console.log(getDay(3));
```

Expected Output:

"Wednesday"

5. Print First 5 Multiples of a Number

Question:

Write a function that prints the first five multiples of a given number using a for loop.

Input:

```
printMultiples(3);
```

Expected Output:

```
3
6
9
12
15
```

6. Grade Calculator

Question:

Write a function that takes a student's marks and returns their grade using the following criteria:

- marks $>= 90 \rightarrow "A"$
- marks $>= 75 \rightarrow "B"$
- marks $>= 50 \rightarrow \text{"C"}$
- marks $< 50 \rightarrow$ "Fail"

Input:

```
console.log(calculateGrade(85));
```

Expected Output:

"B"

7. Reverse a String Using a Loop

Question:

Write a function to reverse a string using a for loop.

Input:

```
console.log(reverseString("hello"));
```

Expected Output:

"olleh"

8. Sum of Even Numbers in an Array (for...of)

Question:

Write a function that sums all even numbers in an array using for . . . of.

Input:

```
console.log(sumEvenNumbers([2, 5, 8, 11, 4]));
```

Expected Output:

14

9. Count the Properties in an Object (for...in)

Question:

Write a function that counts the number of properties in an object using for . . . in.

Input:

```
const user = { name: "Alice", age: 25, city: "New York" };
console.log(countProperties(user));
```

Expected Output:

3

10. Find Prime Numbers Between Two Numbers

Question:

Write a function that finds all prime numbers between two numbers using a loop.

Input:

```
console.log(findPrimes(10, 20));
```

Expected Output:

```
[11, 13, 17, 19]
```

JS Selection Statement & Loops-Assignment Questions

11. ATM Cash Withdrawal System

Question:

Write a function that simulates an ATM. It should check if the balance is sufficient and allow withdrawals in multiples of 100 only.

Input:

```
atmWithdraw(1500, 700);
```

Expected Output:

```
"Withdrawal Successful. Remaining Balance: 800"
```

12. Find the Factorial of a Number Using a Loop

Question:

Write a function that calculates the factorial of a number using a loop.

Input:

```
console.log(factorial(5));
```

Expected Output:

120

13. Find the Most Frequent Element in an Array

Question:

Write a function that finds the most occurring element in an array.

Input:

```
console.log(mostFrequent([2, 3, 2, 5, 3, 2, 4]));
```

Expected Output:

2

14. Reverse the Words in a Sentence

Question:

Write a function that reverses the words in a sentence.

Input:

```
console.log(reverseWords("hello world"));
```

Expected Output:

"world hello"

15. Find the Longest Word in a Sentence

Question:

Write a function that finds the longest word in a given sentence.

Input:

```
console.log(longestWord("The quick brown fox jumps over the lazy dog"));
```

Expected Output:

"jumps"