

Module 1: Introduction to Java Fundamentals

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1 Which class is immutable?

- A) String
- B) StringBuilder
- C) StringBuffer
- D) Character

- 1 Which class is immutable?
 - A) String
 - B) StringBuilder
 - C) StringBuffer
 - D) Character
- 2 What is the range of `Math.random()`?
 - A) 0 to 1
 - B) $0.0 \leq \text{value} \leq 1.0$
 - C) $0.0 \leq \text{value} < 1.0$
 - D) 1 to 10

Module 1: Revision

- 1 Predict the output:

```
String s = "Java";  
s.concat(" Programming");  
System.out.println(s);
```

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```

2 Which is fastest for repeated string modification?

- A) String
- B) StringBuffer
- C) StringBuilder
- D) All are same

- ❶ What will be the output?

```
int x = 5;  
System.out.println(x++ + ++x);
```

- ① What will be the output?

```
int x = 5;  
System.out.println(x++ + ++x);
```

- ② Which statement is TRUE?

- A) StringBuilder is thread-safe
- B) StringBuffer is immutable
- C) String is immutable
- D) String is faster than StringBuilder

- 1 Predict the output:

```
StringBuilder sb = new StringBuilder("Hi");  
sb.append(" All");  
System.out.println(sb);
```


- 1 Predict the output:

```
StringBuilder sb = new StringBuilder("Hi");  
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System.out.println(sb);
```

- 2 Write a program to generate a random number from 1 to 6 (dice).

1 Fix the bug:

```
String s = "Hi";  
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System.out.println(s);
```

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```
String s = "Hi";  
s.concat(" All");  
System.out.println(s);
```

- 2 Write a program to compare two strings correctly.

- 1 Predict the output and explain:

```
StringBuilder sb1 = new StringBuilder("Hello");  
StringBuilder sb2 = sb1;  
sb2.append(" World");  
System.out.println(sb1);
```

- 1 Predict the output and explain:

```
StringBuilder sb1 = new StringBuilder("Hello");  
StringBuilder sb2 = sb1;  
sb2.append(" World");  
System.out.println(sb1);
```

- 2 Generate a 4-digit OTP using `Math.random()` and display it using `StringBuilder`.

- 1 Predict the output:

```
String s1 = "Hello";  
String s2 = "Hello";  
System.out.println(s1 == s2);
```

- 1 Predict the output:

```
String s1 = "Hello";  
String s2 = "Hello";  
System.out.println(s1 == s2);
```

- 2 Write a program to check whether a number is even or odd using ternary operator.

① Predict the output:

```
String s1 = new String("Java");  
String s2 = new String("Java");  
System.out.println(s1 == s2);  
System.out.println(s1.equals(s2));
```


- 1 Predict the output:

```
String s1 = new String("Java");  
String s2 = new String("Java");  
System.out.println(s1 == s2);  
System.out.println(s1.equals(s2));
```

- 2 Write a program to generate a random OTP of length 4 using `Math.random()`.

① Predict the output:

```
StringBuilder sb = new StringBuilder("A");  
sb.append("B").append("C");  
System.out.println(sb);
```

- ① Predict the output:

```
StringBuilder sb = new StringBuilder("A");  
sb.append("B").append("C");  
System.out.println(sb);
```

- ② Predict the output:

```
int x = 10;  
System.out.println(x++ + ++x + x);
```

Module 1: Revision

- 1 Predict the output:

```
String s = "Java";  
s = s.concat(" World").toUpperCase();  
System.out.println(s);
```

Module 1: Revision

- ① Predict the output:

```
String s = "Java";  
s = s.concat(" World").toUpperCase();  
System.out.println(s);
```

- ② Predict the output:

```
StringBuilder sb1 = new StringBuilder("Hi");  
StringBuilder sb2 = sb1;  
sb1 = new StringBuilder("Hello");  
sb2.append(" All");  
System.out.println(sb1);  
System.out.println(sb2);
```

Thank You!

Stay Connected

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