

# Wipro WILP Technical Interview Preparation - Java Based Q&A

## 1. What is the difference between while and do-while loop?

In a while loop, the condition is checked before the loop body is executed. If the condition is false initially, the loop body won't run.

In a do-while loop, the condition is checked after executing the loop body. So, the loop executes at least once.

Example:

```
while(condition) {
```

```
    // code
```

```
}
```

```
do {
```

```
    // code
```

```
} while(condition);
```

## 2. Write a program to check if a number is prime in Java.

```
public class PrimeCheck {
```

```
    public static void main(String[] args) {
```

```
        int number = 29, i;
```

```
        boolean isPrime = true;
```

```
        if (number <= 1) isPrime = false;
```

```
        for (i = 2; i <= Math.sqrt(number); i++) {
```

```
            if (number % i == 0) {
```

```

        isPrime = false;

        break;
    }
}

if (isPrime)

    System.out.println(number + " is a prime number");

else

    System.out.println(number + " is not a prime number");

}
}

```

### 3. What is recursion in Java?

Recursion is a technique where a method calls itself to solve a smaller part of the problem.

Example:

```

int factorial(int n) {

    if (n == 0)

        return 1;

    else

        return n * factorial(n - 1);

}

```

### 4. Write a program to print Fibonacci series in Java.

```

public class Fibonacci {

    public static void main(String[] args) {

        int n = 10, first = 0, second = 1;

        System.out.print("Fibonacci Series: ");
    }
}

```

```
for (int i = 1; i <= n; i++) {  
  
    System.out.print(first + " ");  
  
    int next = first + second;  
  
    first = second;  
  
    second = next;  
  
}  
  
}  
  
}
```

## 5. Difference between == and .equals() in Java

'==' checks if two references point to the same memory location.

.equals() compares the contents of two objects.

Example:

```
String a = new String("test");
```

```
String b = new String("test");
```

```
System.out.println(a == b);    // false
```

```
System.out.println(a.equals(b)); // true
```