

Java Freshers

Candidate-ID	0012400090
Candidate Name	Krishnasai nagulapalli
Email	Krishnasain1919@gmail.com
Mobile	9666858189

Screening Test

Completed on : 24-Dec-2024 12:38 PM

#	Question	Response	Marks
1	Have you fully completed your education and prepared to work	Yes	1
2	Have you taken any long term training course on Java Technologies	Yes	1
3	Have you recently completed your education and training, and there is no major Gap (more than one year after the education)	Yes	1
4	Are you, willing to work on-premises (there is no work from home)	Yes	1
5	Can you write simple Java Programs on your own	Yes	1
6	Are you, available immediately to join us, if we hire you	Yes	1
7	Did you complete any kind of Developer Certification in Java	Yes	1
8	Do you know how to write unit testcases using Junit	Yes	1
9	if we hire you, will you be prepared to stay and work with us at least for two years	Yes	1
10	Will you be flexible any role in Software Engineering	Yes	1
11	Explain about yourself why you are the right candidate for this Job	video response	1

Overall Score : 11/11 (Promoted)

Coding Test

Completed on : 25-Dec-2024 01:15 PM

1. Question: Implement an EMI Calculator in Java. The objective is to create a program that calculates the Equated Monthly Installment (EMI) for a given loan. The EMI is calculated based on the principal loan amount, annual rate of interest, and loan tenure. Sample Input : Principal amount: 500000 Annual rate of interest: 7.5 Loan tenure: 20
Expected Output : The calculated EMI is: 3982.71
Marks Scored : 2

```
public class EMI_Calculator {

    // Method to calculate EMI
    public double calculateEMI(double principal, double annualRateOfInterest, int loanTenure) {
        if (principal < 0) {
            throw new IllegalArgumentException("Principal amount cannot be negative");
        }
        if (annualRateOfInterest < 0) {
            throw new IllegalArgumentException("Interest rate cannot be negative");
        }
        if (loanTenure <= 0) {
            throw new ArithmeticException("Loan tenure cannot be zero or negative");
        }

        double emi=0;

        double mrate=annualRateOfInterest/12/100;

        int temonths=loanTenure*12;

        emi=(principal*mrate*Math.pow(1+mrate,temonths))/(Math.pow(1+mrate,temonths)-1);

        return emi;
    }

    public static void main(String[] args) {
        EMI_Calculator calculator = new EMI_Calculator();

        // Test data
        double principal = 500000;
        double annualRateOfInterest = 10;
        int loanTenure = 20;

        // Calculate EMI
        try {
            double emi = calculator.calculateEMI(principal, annualRateOfInterest, loanTenure);
            System.out.printf("The EMI for a principal of %.2f, interest rate of %.2f%%, and tenure of %d years is: %.2f%n",
                principal, annualRateOfInterest, loanTenure, emi);
        } catch (Exception e) {
            System.err.println("Error: " + e.getMessage());
        }
    }
}
```

```
}
```

2. Question: Unique Words Extractor Write a program to extract all unique words from a given text. A word is defined as a sequence of alphanumeric characters separated by non-word characters (e.g., spaces, punctuation). The program should meet the following criteria: Extract words that are at least 8 characters long. Convert all words to lowercase for uniqueness. Preserve the order of their first appearance in the text. Implement the functionality in the `extractUniqueWords` method. The method should return a `Set` containing the filtered words. Sample Input : "The development of artificial intelligence is advancing rapidly. Innovative technologies are shaping the future of the world." Expected Output : Unique words with at least 8 characters: development artificial intelligence advancing innovative technologies

Marks Scored : 0

```
import java.util.*;
import java.util.stream.Collectors;

public class WordProcessor {

    public static Set extractUniqueWords(String content) {
        LinkedHashSet singlewords= new LinkedHashSet<>();

        String [] word=content.split("[^a-zA-Z0-9]");

        content=content.toLowerCase();

        for(int i=0;i=8)
        {
            singlewords.add(word[i]);
        }
    }
    return singlewords;

}

public static void main(String[] args) {
    // Example content for testing
    String content = "The development of artificial intelligence is advancing rapidly. " +
        "Innovative technologies are shaping the future of the world.";

    // Extract unique words with at least 8 characters
    Set uniqueWords = extractUniqueWords(content);

    // Print the unique words
    System.out.println("Unique words with at least 8 characters:");
    uniqueWords.forEach(System.out::println);
}
}
```

3. Question Write a program to demonstrate most simple usage, application of design pattern prototype. Expected Output: Original: Shape[type=Circle, color=Red] Cloned: Shape[type=Circle, color=Red] After modifying cloned object: Original: Shape[type=Circle, color=Red] Cloned: Shape[type=Circle, color=Blue]

Marks Scored : 6

```
// PrototypeDemo.java
class Shape implements Cloneable {
    private String type;
    private int[] dimensions;

    public Shape(String type, int[] dimensions) {
        this.type=type;
        this.dimensions=dimensions.clone();
    }

    public String getType() {
        return type;
    }

    public int[] getDimensions() {
        return dimensions.clone();
    }

    @Override
    protected Shape clone() {
        try {
            Shape cl=(Shape) super.clone();
            cl.dimensions=this.dimensions.clone();

            return cl;
        } catch (CloneNotSupportedException e) {
            return null;
        }
    }
}

public class PrototypeDemo {
    public static void main(String[] args) {
        Shape original = new Shape("Circle", new int[]{7});
        Shape cloned = original.clone();
        cloned.getDimensions()[0] =14;
        System.out.println("Original Shape: " + original.getType() + " with dimensions " + java.util.Arrays.toString(original.getDimensions()));
        System.out.println("Cloned Shape: " + cloned.getType() + " with dimensions " + java.util.Arrays.toString(cloned.getDimensions()));
    }
}
```

Overall Score : 8/12 (Promoted)

[Interview](#)

Interviewed on : 27-Dec-2024 01:00 PM

Interviewd by : Srinivas Gadepalli

Interview Summary

Java Programming	1.0
Java Technology	2.5
Average interview rating	1.75

Question wise rating:

Java Programming

OOPS Implementation	1
Average rating	1.0

Java Technology

JVM	2
JDK/JRE	3
Average rating	2.5

Interviewer Remarks:

No Remarks

Interviewer's Feedback:

Interviewer	Decision	Notes
Srinivas Gadepalli	Not Hire	communication and english is a problem with him, JVM don't clear concepts on it