**TECHNICAL ASSESSMENT:**

**Answers:**

**1) [delhi,Chandigarh,Punjab,jaipur]**

**2) PROGRAMMING**

**3) 202 finally block**

**4) True&False**

**5) options 2,4,5**

**6) 30**

**7) \_avg**

**8) ToString**

**9) Protected**

**10) String S1= null**

**MCQ:**

1. **Final class A{}**
2. **Objects**
3. **ABC**
4. **True**
5. **74**
6. **Compile time error**
7. **Garbage value**
8. **a equals b**
9. **superclass**
10. **compile time error**

**CODING:**

class Roman {

  static int sub\_digit(char num1, char num2, int i, char[] c) {

        c[i++] = num1;

        c[i++] = num2;

        return i;

    }

    static int digit(char ch, int n, int i, char[] c) {

        for (int j = 0; j < n; j++) {

            c[i++] = ch;

        }

        return i;

    }

    static void printRoman(int number) {

        char c[] = new char[10001];

        int i = 0;

        if (number <= 0) {

            System.out.printf("Invalid number");

            return;

        }

        while (number != 0) {

            if (number >= 1000) {

                i = digit('M', number / 1000, i, c);

                number = number % 1000;

            }

            else if (number >= 500) {

                if (number < 900) {

                    i = digit('D', number / 500, i, c);

                    number = number % 500;

                }

                else {

                    i = sub\_digit('C', 'M', i, c);

                    number = number % 100;

                }

            else if (number >= 100) {

                if (number < 400) {

                    i = digit('C', number / 100, i, c);

                    number = number % 100;

                }

                else {

                    i = sub\_digit('C', 'D', i, c);

                    number = number % 100;

                }

            }

            else if (number >= 50) {

                     if (number < 90) {

                    i = digit('L', number / 50, i, c);

                    number = number % 50;

                }

                else {

                    i = sub\_digit('X', 'C', i, c);

                    number = number % 10;

                }

            }

            else if (number >= 10) {

                                if (number < 40) {

                    i = digit('X', number / 10, i, c);

                    number = number % 10;

                }

                else {

                    i = sub\_digit('X', 'L', i, c);

                    number = number % 10;

                }

            }

            else if (number >= 5) {

                if (number < 9) {

                    i = digit('V', number / 5, i, c);

                    number = number % 5;

                }

                else {

                    i = sub\_digit('I', 'X', i, c);

                    number = 0;

                }

            }

            else if (number >= 1) {

                if (number < 4) {

                    i = digit('I', number, i, c);

                    number = 0;

                }

                else {

                    i = sub\_digit('I', 'V', i, c);

                    number = 0;

                }

            }

        }

        System.out.printf("Roman numeral is: ");

        for (int j = 0; j < i; j++) {

            System.out.printf("%c", c[j]);

        }

    }

  public static void main(String[] args) {

        int number = 3549;

        printRoman(number);

    }

}