## **Internal Java Coding Exam (45-60 minutes)**

Here are the criteria for scoring:

- 1. 35% Object Oriented Programming
- 2. 20% Application should be working and all requirements are followed
- 3. 20% Coding style
- 4. 15% Use of Utilities and Constants.
- 5. **10%** Code cleanup.

Passing Grade: 80%

## Instructions:

Create a simple java application that will emulate a number guessing game.

Players should be able to guess the random number between 1-10 for 5 rounds. The application will display the results.

## **Game Requirements:**

- 1. Your application should have 5 players. Player names should be entered.
- 2. Your application should have 5 rounds of number guessing game
- 3. Each player should be able to input a number for each round; number should be between 1-10
- 4. A player will win the round if he guessed the random number correctly
- 5. System will display all results after all rounds. Results should include winner of each round, player history with score, and overall winner of the entire game.
- 6. Try again feature is required
- 7. Error handling is optional

Note: this screenshot is a sample output for requirements 1-3

## **Expected output**

1. Results of the game should be displayed after all 5 rounds are completed

```
Guess Number for round 1:1
Winner/s:
Player: Player 1
Guess Number for round 2:10
Guess Number for round 3:5
Winner/s:
Player: Player 1
Player: Player 2
Player: Player 3
Player: Player 4
Player: Player 5
Guess Number for round 4:3
No winner
Guess Number for round 5:8
No winner
```

2. Each player's history and total score should be displayed

```
Player name:Player 1
Round 1 Guess value:1 Correct value:1
Round 2 Guess value: 4 Correct value: 10
Round 3 Guess value:5 Correct value:5
Round 4 Guess value:6 Correct value:3
Round 5 Guess value:7 Correct value:8
Your score is:2
Player name:Player 2
Round 1 Guess value: 2 Correct value: 1
Round 2 Guess value: 4 Correct value: 10
Round 3 Guess value:5 Correct value:5
Round 4 Guess value:6 Correct value:3
Round 5 Guess value:7 Correct value:8
Your score is:1
Player name:Player 3
Round 1 Guess value:3 Correct value:1
Round 2 Guess value: 4 Correct value: 10
Round 3 Guess value:5 Correct value:5
Round 4 Guess value:6 Correct value:3
Round 5 Guess value:7 Correct value:8
Your score is:1
Player name:Player 4
Round 1 Guess value: 4 Correct value: 1
Round 2 Guess value: 4 Correct value: 10
Round 3 Guess value:5 Correct value:5
Round 4 Guess value:6 Correct value:3
Round 5 Guess value:7 Correct value:8
Your score is:1
Player name:Player 5
Round 1 Guess value:5 Correct value:1
Round 2 Guess value:4 Correct value:10
Round 3 Guess value:5 Correct value:5
Round 4 Guess value:6 Correct value:3
Round 5 Guess value:7 Correct value:8
Your score is:1
```

3. The overall winner should be printed

The Overall winner/s:
Player:Player 1

Develop the code in your IDE and once completed, zip it in a compressed folder and send to <a href="mailto:lN00499441@TechMahindra.com">JN00499441@TechMahindra.com</a> using the following format:

Email Subject: < Java Exam\_Full Name>

Filename: <Java Exam\_Full Name>

