1. **Exception Handling -1(Arithmetic exception and Number format exception)**

Write a program to calculate the run rate with the formula, The given values are

Run rate= total runs scored/total overs faced.

Use BufferedReader class to get the inputs from user.

This program may generate **Arithmetic Exception / NumberFormatException**. Use exception handling mechanisms to handle this exception. Use a single catch block. In the catch block, print the class name of the exception thrown.

**Input and Output Format:**

Refer sample input and output for formatting specifications.

All text in bold corresponds to input and the rest corresponds to output.

**Sample Input and Output 1:**

Enter the total runs scored

**79**

Enter the total overs faced

**14**

Current Run Rate : 5.64

**Sample Input and Output 2:**

Enter the total runs scored

**50**

Enter the total overs faced

**0**

java.lang.ArithmeticException

**Sample Input and Output 3:**

Enter the total runs scored

**a**

java.lang.NumberFormatException

1. **Exception 2(ArrayIndexOutOfBoundsException And NegativeArraySizeException)**

Write a program to get the number of overs and the runs scored in each over. Get the over number from the user and display number of runs scored in that over. Let

* number of overs be the array size
* over number be the index of the array+1
* runs be the array elements

This program may generate

1. NegativeArraySize Exception when the number of overs is negative

2. ArrayIndexOutOfRange Exception when the over number that is searched is beyond the specified over numbers.   
  
Use exception handling mechanisms to handle these exceptions.Use a single catch block. In the catch block, print the class name of the exception thrown.

**Input and Output Format:**

Refer sample input and output for formatting specifications.

All text in bold corresponds to input and the rest corresponds to output.

**Sample  Input/Output 1:**

Enter the number of overs

**3**

Enter the number of runs for each over

**8**

**15**

**12**

Enter the over number

**2**

Runs scored in this over : 15

**Sample  Input/Output 2:**

Enter the number of overs

**3**

Enter the number of runs for each over

**8**

**15**

**12**

Enter the over number

**4**

java.lang.ArrayIndexOutOfBoundsException

**Sample  Input/Output 3:**

Enter the number of overs

**-1**

Enter the number of runs for each over

java.lang.NegativeArraySizeException

1. **Custom Exceptions [Age]**

Write a program to get the name and age of the player from the user and  display it.   
player name is a string   
player age is an integer value   
Note : The player is eligible to participate in IPL when their age is 19 and above   
    
This program may generate     
1. InvalidAgeRange Custom Exception when the player's age is below 19   
 Use exception handling mechanisms to handle these exceptions

 Create a class called **CustomException** which extends **Exception** and it includes constructor to initialize the message.

 Use appropriate exception handling mechanisms to handle these exceptions 

**Input and Output Format:**

Refer sample input and output for formatting specifications.

All text in bold corresponds to input and the rest corresponds to output.

**Sample  Input/Output 1:**

Enter the player name

**Albie Morkel**

Enter the player age

**35**

Player name : Albie Morkel

Player age : 35

**Sample  Input/Output 2:**

Enter the player name

**Ishan Kishan**

Enter the player age

**16**

CustomException: InvalidAgeRangeException

1. **TeamNameNotFound Exception**

Write a program to get the two team names i.e expected Runner and Winner team of IPL season 13 and display it.

Team name is a string

**Note** : The team name given below are only eligible to take part in IPL season 13

Chennai Super Kings

Sun Risers Hyderabad

Delhi Capitals

Kings XI Punjab

Kolkata Knight Riders

Mumbai Indians

Rajasthan Royals

Royal Challengers Bangalore

This program may generate TeamNameNotFound Custom Exception when the expected team entered is not present in the above eligible teams list for IPL season 13.

Use exception handling mechanisms to handle these exceptions

**Input and Output Format:**

Refer sample input and output for formatting specifications.

All text in bold corresponds to input and the rest corresponds to output.

**Sample Input and Output 1:**

Enter the expected winner team of IPL Season 13

**Chennai Super Kings**

Enter the expected runner Team of IPL Season 13

**Mumbai Indians**

Expected IPL Season 13 winner: Delhi Capitals

Expected IPL Season 13 runner: Kolkata Knight Riders

**Sample Input and Output 1:**

Enter the expected winner team of IPL Season 13

**Tamil Thalaivas**

TeamNameNotFoundException: Entered team is not a part of IPL Season 13