Day 4: Lab assignment on IO and Exception Handling

1) Write a program to Read from file in byte format and Write to command prompt in both byte format and using formatted output(System.out.print or println)
2) Write a program to Read from command prompt using character buffer and Write to a file using character buffer.
3) Write a program to serialize and deserialize an object of Employee class. Employee class has the following members.

BankAccount
String name,id; Address address; double salary; (nonserializable)
void display()

4) Write a program that will prompt user to input a number or enter -1 to quit the program. You will then read the value using the **nextInt()** method of **Scanner** object and display if the number is even or odd. If user enters anything other than integer number. nextInt() method will throw ***InputMismatchException***. You have to **catch** the **exception** and display a message saying "You must enter an integer".

   Sample output:
   "Please enter a number or enter '-1' if you want to quit"
   3
   "You have entered an odd number"
   "Please enter a number or enter '-1' if you want to quit"
   4
   "You have entered an even number"
   "Please enter a number or enter '-1' if you want to quit"
   a
   "You must enter an integer."
   "Please enter a number or enter '-1' if you want to quit"
   4.5
   "You must enter an integer."

   .
   .
   "Please enter a number or enter '-1' if you want to quit"
   -1
   [Your program will end here]

5) Modify the code to **throw** an **Exception** if the number is greater than 100, set the **exception message** to "Number can't be greater than 100". **Catch** the **Exception** and display the exception message.

6) Now create your own exception named "**InputException**" which will take an integer (let's say n) as parameter and set the exception message to "Number can't be greater than [n]". Modify the program in #1 to **throw InputException** when the number is greater than 100. So, the exception message will be "Number can't be greater than 100". **Catch** the exception and **display** the exception message.

7) Create a class and a method named ***throwException*** which will throw 2 exceptions 1) **InputException** and 2) **IOExcception**. Now from the **main method** call this ***throwException*** method; notice what the IDE suggest to fix the error. Choose the try/catch solution. **How many catch blocks have been added and why**?