**Group Activity:**

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**IllegalArugmentExcpetion**

The **IllegalArgumentException** is intended to be used anytime a method is called with any argument(s) that is improper, for whatever reason.

This exception extends the RuntimeException class and thus, belongs to those exceptions that can be thrown during the operation of the Java Virtual Machine (JVM). It is an unchecked exception and thus, it does not need to be declared in a method’s or a constructor’s throws clause.

**EXAMPLE:**

**CODE**

**public class Student {**

**int m;**

**public void setMarks(int marks) {**

**if(marks < 0 || marks > 100)**

**throw new IllegalArgumentException(Integer.toString(marks));**

**else**

**m = marks;**

**}**

**public static void main(String[] args) {**

**Student s1 = new Student();**

**s1.setMarks(45);**

**System.out.println(s1.m);**

**Student s2 = new Student();**

**s2.setMarks(101);**

**System.out.println(s2.m);**

**}**

**}**

**Terminal**

**45  
Exception in thread "main" java.lang.IllegalArgumentException: 101  
at Student.setMarks(Student.java:5)  
at Student.main(Student.java:15)**

**RESOLVING using IllegalArgumentException :**

**import java.util.Scanner;**

**public class Student {**

**public static void main(String[] args) {**

**String cont = "y";**

**run(cont);**

**}**

**static void run(String cont) {**

**Scanner scan = new Scanner(System.in);**

**while( cont.equalsIgnoreCase("y")) {**

**try {**

**System.out.println("Enter an integer: ");**

**int marks = scan.nextInt();**

**if (marks < 0 || marks > 100)**

**throw new IllegalArgumentException("value must be non-negative and below 100");**

**System.out.println( marks);**

**}**

**catch(IllegalArgumentException i) {**

**System.out.println("out of range encouneterd. Want to continue");**

**cont = scan.next();**

**if(cont.equalsIgnoreCase("Y"))**

**run(cont);**

**}**

**}**

**}**

**}**

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