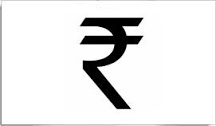
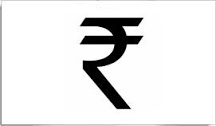
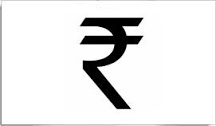
**RAMAIAH INSTITUTE OF TECHNOLOGY**

**(Department of Information Science and Engineering)**

**IS334B – OOPS with Java: Surprise Test – 2 At 9.55 to 10.50am On 23.Nov.2017 For 3B (Soft-Core Class)**

1. Code the following scenario in Java, use Exceptions in the correct place. **(10 Marks)**

In a carnival a player can throw a special dice with 6 faces having any one of the following numbers 0,1,2,3,4,5 appearing uniquely on each side of its face. Each time a player throws the dice, the price amount 1000 will get divided by the value that appears in the face & the player can take that amount away as his/her prize. The following rules apply:

* The fee to enter this game is 500
* The maximum number of times the player can throw the dice for this entry fee is 10.
* Upon entry into the game, the use has to throw the dice a minimum of three times to be able to carry away the prize money.
* If the user throws the dice-face value ‘0’, the entire money won by the user till then, has to be surrendered, the player has to pay an additional 500, apart from the entry fee and the game stops for the player, for that entry.

**Example**: Mydhili pays Rs.500 as entry fee. She can roll the dice a maximum of 10 times. She needs to throw the dice minimum 3 times to be eligible to take away price money.

|  |  |  |  |
| --- | --- | --- | --- |
| **Scenario 1** | **Scenario 2** | **Scenario 3** | **Scenario 4** |
| **1)**She rolls 2 : She gets Rs.1000/2 = Rs.500  **2)**She rolls 3: She gets Rs.1000/3 = Rs.333  **3)**She rolls 5: She gets Rs.1000/5 = Rs.200  Total prize she gets: **Rs.1033** | **1)**She rolls 2 : She gets Rs.1000/2 = Rs.500  **2)**She rolls 3: She gets Rs.1000/3 = Rs.333  **3)**She rolls 0: Error! Surrender all price money.  Total prize she gets: **Rs. 0** | **1)**She rolls 2 : She gets Rs.1000/2 = Rs.500  **2)**She rolls 3: She gets Rs.1000/3 = Rs.333  **3)** She rolls 5: She gets Rs.1000/5 = Rs.200  **4)** She rolls 4: She gets Rs.1000/4 = Rs.250  **5)** She rolls 6: She gets Rs.1000/6 = Rs.166  **6)**She rolls 4: She gets Rs.1000/4 = Rs.250  **7)**She rolls 0: Error! Surrender all price money.  Total prize she gets: **Rs. 0** | **1)**She rolls 2 : She gets Rs.1000/2 = Rs.500  **2)**She rolls 3: She gets Rs.1000/3 = Rs.333  **3)** She rolls 5: She gets Rs.1000/5 = Rs.200  **4)** She rolls 4: She gets Rs.1000/4 = Rs.250  **5)** She rolls 6: She gets Rs.1000/6 = Rs.166  **6)**She rolls 4: She gets Rs.1000/4 = Rs.250  **7)** She rolls 5: She gets Rs.1000/5 = Rs.200  **8)** She rolls 4: She gets Rs.1000/4 = Rs.250  **9)** She rolls 6: She gets Rs.1000/6 = Rs.166  **10)**She rolls 1: She gets 1000/1 = Rs.1000  Total: **Rs.3315** prize money |