CS0410 INTRODUCTION TO COMP SCI APPLIC

Assignment 5 – Tickets

Problem

A certain theater has ticket prices of $20 for adults and $15 for children. If the number in a party is more than 10 and less than 20 then the ticket prices are $18.75 and $13.75. If the number in the party is at least 20 then the ticket prices are $17.50 and $12.50. The theater is also running a promotion where each payer picks a 7 digit number and if it is divisible by 7 or 11 but not both then the payer gets a 5% discount.

Write a program called **Tickets** to input the number of adults and children in a party and calculate and output the cost of the tickets. The discount should be applied at the end and the total cost printed.

The output should look like:

```
Enter the number of child tickets: 8
Enter the number of adult tickets: 5
Enter 7 digit number: 3729814

Total cost of children = **Answer**
Total cost of adults = **Answer**
Total cost of group (no discount) = **Answer**
Discount = **Answer**
Final Cost = **Answer**
```

Notes

1. Use if structure(s) when calculating because there are different cases. You do not have to handle error cases.
2. Use a **`final`** (constant) for the 6 ticket prices in the program:

```
final double HIGH_ADULT_RATE = 20.0;
```

3. Properly comment, indent and line up your program. Add comments for all variables used.

Turning in the Assignment

1. When you have finished, run your program using the test data below (6 separate runs of the program, one after the other):

Test Data	Child tickets	Adult Tickets	7 digit #
Set 1	8	5	3729814
Set 2	10	10	3000000
Set 3	12	10	1234555
Set 4	4	3	7580804
Set 5	6	4	1111111
Set 6	0	2	8294038

2. Take a screenshot (or two) of the test data running. Upload screenshot(s), **Tickets.java** and **Tickets.class** files to Canvas.

Due Date: start of class on 2/17