# Military Institute of Science and Technology B.Sc. in Computer Science and Engineering Subject: CSE-204, Data Structures and Algorithms-I Sessional Online-1, Spring 2024, Sec-B

\*\*This Lab Test will achieve CO4\*\*

Time: 1.5 hrs Full Marks: 40

ID:		NAME:			
	Question-1	Question-2	Question-3	Total	Evaluator
Marks	10	10	20	40	

### **Question-1**

You are a software engineer at a tech company developing a sophisticated markdown text editor. This editor is designed for content creators who rely heavily on precise formatting to produce rich text documents. The editor supports bold and italic formatting using markdown syntax: bold text is marked with \*\* (double asterisks), and italic text is marked with \* (single asterisk). Given the popularity of the editor, users often report issues where the formatted text appears incorrectly due to unbalanced or improperly nested markers.

Enhance the editor by implementing a C program to ensure bold and italic markers are properly balanced and nested in markdown text. This will prevent formatting issues and provide a seamless writing experience. The program should check for correctly balanced and nested bold and italic markers, ignoring other characters.

## **Requirements:**

- 1. **Input:** A single string containing the text with bold and italic markers.
- 2. **Output:** A single line: "Valid" if the markers are properly balanced and nested, "Invalid" otherwise.

### 3. Constraints:

- The input string can be up to 1000 characters long.
- The text may contain any printable ASCII characters.
- Bold markers \*\* and italic markers \* must be properly nested and not overlap incorrectly.

### **Sample Input Output**

Input	Output
This is **bold** and *italic* text.	Valid
This is **bold* and *italic** text.	Invalid
This is **bold and *italic* text**.	Valid
This is **bold** and *italic text.	Invalid

Marking Criteria	Marks
Stack Implementation	6
Condition Checking	3
Input/ Output	1

## **Question-2: The Triangle Quest: A Tale of Sticks and Triangles**

In the land of Geometry, there exists a set of magical sticks, each with a distinct length. The wise King of Geometry summoned his most trusted mathematician, Arithmo, for an important task. "Arithmo," he said, "you must determine how many valid triangles can be formed using these sticks. A triangle is only valid if it has a positive area. Go forth and solve this puzzle!"

Arithmo knew that for any three sticks to form a triangle, they must satisfy the triangle inequality theorem, which states that **the sum of the lengths of any two sides must be greater than the length of the remaining side**. With this knowledge, Arithmo devised a plan to count all possible valid triangles.

Input starts with a line containing an integer n. The next line contains n integers denoting the lengths of the sticks. You can assume that the lengths are distinct and each length lies in the range [1, 109].

### **Sample Input Output**

Input	Output
5 3 12 5 4 9	No of Valid Triangle: 3
6 1 2 3 4 5 6	No of Valid Triangle: 7
4 100 211 212 121	No of Valid Triangle: 4

Marking Criteria	Marks
Sorting	3
Binary Search	5
Input/ Output	2

#### **Question 3: Who Gets the Salami?**

You were known as the best salami hunter during your days, always receiving a lot of salami from seniors and friends. Now that you've graduated, your juniors are messaging you for salami this Eid. Because of your good relationship with them, you can't ignore these messages. However, as a recent graduate without a job, you don't have much money to give.

You've decided to allocate some money for the salami. You've decided to distribute the salami as follows: 10 taka to your friends, 100 taka to your immediate juniors (CSE-24), 70 taka to CSE-25, and 50 taka to CSE-26. Given your limited resources, you might not be able to give salami to all juniors who message you. To manage this, you plan to implement a linked list-based priority queue that prioritizes message senders as follows: your batchmates will have the highest priority, followed by CSE-24, CSE-25, and CSE-26 consecutively. If you receive multiple messages from the same batch but can only give money to one of them, you'll prioritize the person who messaged you first.

Each node in the linked list will store two pieces of data: 1) the name of the person, and 2) their batch information (see Figure).

Name	Batch
Ripon	25

An example of individual node

Suppose the current priority queue is: (Ripon, 24) -> (Arif, 25).

Then you open the messenger app and see: (Zara, 24). So the current priority queue will be:

After that, you receive: (Azmain, 23). So the current priority queue will be:

$$(Azmain, 23) \rightarrow (Ripon, 24) \rightarrow (Zara, 24) \rightarrow (Arif, 25).$$

Initially, you will input the amount of money you have available for distribution.

Now, your task is to implement four functions:

- 1. Push This function will be used to insert a value into the queue.
- 2. Pop This function will remove the person who received the salami.
- 3. Peek This function will return the person who received the salami without removing them.
- 4. Count juniors This function will print the count of juniors (see Sample Input/Output for reference).

Enter the amount you have in the Salami Fund: 250  Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Ripon Enter batch: 24  Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 24  Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 24  Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25  Options: 1. Push 2. Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Select your option: 6 Select your option: 2 Select your option: 3 Select your option:	Sample Input/Output	Sample Input/Output (cont.)
Options:   2. Pop   3. Peek   2. Pop   3. Peek   4. Count juniors   5. Current Salami Fund   6. Exit   5. Current Salami Fund   6. Exit   6. Exit   7. Push   7. Pus	Enter the amount you have in the Salami Fund: 250	•
1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Ripon Enter batch: 24 Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 24 Options: 1. Push Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 25 1. Push 1. Push 1. Push 2. Pop 3. Peek 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Select your option: 2 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 2 Select your option: 1 Enter name: Zara 1. Push 1. Push 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 1 Enter name: Zara 1. Push 1. Pus		1. Push
1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Ripon Enter batch: 24 Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami recipient: (Azmain, Select your option: 1 Enter batch: 24 Options: 1. Push Options: 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 25 1. Push Options: 1. Push Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Enter batch: 25 1. Push 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) 1. Push 2. Pop Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Salami Fund: 240 Exit Select your option: 2 Select your option: 1 Enter name: Zara 1. Push 1. Push 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 2 Select your option: 1 Enter name: Zara 1. Push	Options:	2. Pop
3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 7. Current Salami Fund 6. Exit 8elect your option: 3 7. Push 7. Push 7. Current Salami Fund 8. Exit 8elect your option: 3 7. Push 9. Pop 9. Peek 9. Pop 9. Peek 9. Current Salami Fund 9. Exit 8elect your option: 1 8elect your option: 2 9. Pop 9. Peek 9. Pop 9. Peek 9. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Peek 9. Pop 9. S. Current Salami Fund 9. Peek 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. Curr		3. Peek
3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 7. Current Salami Fund 6. Exit 8elect your option: 3 7. Push 7. Push 7. Current Salami Fund 8. Exit 8elect your option: 3 7. Push 9. Pop 9. Peek 9. Pop 9. Peek 9. Current Salami Fund 9. Exit 8elect your option: 1 8elect your option: 2 9. Pop 9. Peek 9. Pop 9. Peek 9. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Peek 9. Pop 9. S. Current Salami Fund 9. Peek 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. S. Current Salami Fund 9. Exit 9. Pop 9. Curr	2. Pop	4. Count juniors
4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Ripon Enter batch: 24 Options: 1. Push Options: 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Options: 1. Push Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter hatch: 25 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. P	1	
5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Ripon Enter batch: 24 Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Enter name: Arif Enter name: Arif Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund 6. Exit Select your option: 5 Salami Fund 6. Exit Select your option: 5 Salami Fund: 240 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund: 240 6. Exit Select your option: 5 Salami Fund: 240 6. Exit Select your option: 5 Salami Fund: 240 6. Exit Select your option: 5 Salami Fund: 240 6. Exit Select your option: 5 Salami Fund: 240 6. Exit Select your option: 2 Ripon received 100 taka as salami Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami		
6. Exit Select your option: 1 Enter name: Ripon Enter batch: 24 Options: 1. Push Options: 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 1. Push Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund: 240 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Repo Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Select your option: 1 Enter name: Zara 1. Push 1. Pu	· ·	Select your option: 3
Select your option: 1 Enter name: Ripon Enter batch: 24 Options: 1. Push Options: 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push Options: 1. Push Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) C. Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Select your option: 1 Enter name: Zara I. Push I		
Enter name: Řipon Enter batch: 24  Options:  1. Push 2. Pop 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 25  1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 2 Select your option: 2 Ripon received 100 taka as salami Select your option: 1 Enter name: Zara 1. Push 1. Push 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara 1. Push		1 \
Enter batch: 24  Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter batch: 25 Options: 1. Push Options: 1. Push Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Scurrent Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Ditions: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Ditions: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 2 Ripon received 100 taka as salami Options: 1. Push Select your option: 2 Ripon received 100 taka as salami Options: 1. Push Options: 1. Push Options: 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara Options: 1. Push		-,
1. Push   2. Pop   3. Peek   4. Count juniors   5. Current Salami Fund   6. Exit   6. Exit   6. Exit   6. Exit   7. Push   7. Pop   7. P		Options:
Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 1. Push 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Options: 1. Push 2. Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. Push 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami		
1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 1 Enter name: Zara Select your option: 1 Enter name: Zara Select your option: 1 Select your option: 2 Select your option: 1 Select your option: 1 Select your option: 1 Select your option: 1 Select your option: 2 Select your option: 1 Select your option: 2 Select your option: 1 Select your option: 2 Select your option: 2 Select your option: 1 Select your option: 2 Select your option: 2 Select your option: 2 Select your option: 2 Select your option: 3 Select your option: 2 Select your option: 3 Select your option: 3 Select your option: 4 Select your option: 5 Select your option: 4 Select your	Ontions:	
2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1  Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Details: A Count juniors 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Details: A Count juniors 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara Options: 1. Push	*	
3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push Select your option: 1 Enter name: Zara 1. Push		
4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Azmain received 10 taka as salami  Select your option: 1 Enter name: Arif Enter batch: 25 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Select your option: 1 Enter name: Zara Select your option: 1 Enter name: Zara Select your option: 1	-	J.
5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Arif Enter batch: 25 Options: 1. Push 2. Pop Options: 1. Push 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. Push 1. Push 1. Push 1. Push 2. Pop 3. Peek 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push		
6. Exit Select your option: 1 Enter name: Arif Enter batch: 25  Options: 1. Push 2. Pop 3. Peek 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 10 taka as salami Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 10 taka as salami Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push	3	
Select your option: 1 Enter name: Arif Enter batch: 25  Options:  1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push 1. Push 1. Push 2. Pop 3. Peek 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara 1. Push		
Enter name: Arif Enter batch: 25  Coptions: 1. Push 2. Pop 3. Peek 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Coptions: 1. Push 2. Pop 3. Peek 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit 5. Current Salami Fund 6. Exit 5. Current Salami Fund 7. Current Salami Fund 8. Exit 8. Count juniors 9. Current Salami Fund 9. Exit 9. Current Salami Fund		Azmani received to taka as salami
Enter batch: 25  Detections: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 8. Select your option: 3 The most eligible salami recipient: (Ripon, 24)  Detections: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 8. Select your option: 3 The most eligible salami recipient: (Ripon, 24)  Detections: 1. Push 2. Pop 3. Peek 4. Count juniors 4. Count juniors 5. Current Salami Fund 6. Exit 8. Current Salami Fund 7. Current Salami Fund 8. Current Salami Fund 9. Exit 8. Current Salami Fund 9. Exit 9. Current Salami Fund 9. Current Salami		Ontions:
2. Pop   3. Peek   1. Push   4. Count juniors   5. Current Salami Fund   6. Exit   8. Exit   9. Pop   5. Current Salami Fund   9. Exit   9. Pop   9. Exit   9.		•
Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: 1. Push Options: 1. Push 1. Push	Effect batch. 25	
1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 3. Peek 1. Push 4. Count juniors 2. Pop 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 6. Exit 7. Current Salami Fund 7. Cunt juniors 8. Select your option: 2 8. Current Salami Fund 8. Exit 8. Count juniors 9. Current Salami Fund 9. Exit	Ontions	*
2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 5 Salami Fund: 240  Options: The most eligible salami recipient: (Ripon, 24)  Options: 1. Push 2. Pop Options: 1. Push 4. Count juniors 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 6. Exit 7. Current Salami Fund 7. Current Salami Fund 8. Exit 8. Current Salami Fund 8. Exit 8. Current Salami Fund 9. Exit 9. Current Salami Fund 9. Exit 9. Current Salami Fund 9. Current Salami Fu	*	
3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: Enter name: Zara Options: 1. Push		
4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 3. Peek 1. Push 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 5. Current Salami Fund 6. Exit 6. Exit 7. Select your option: 2 7. Current Salami Fund 7. Current Salami Fund 8. Exit 8. Current Salami Fund 9. Curren	-	
5. Current Salami Fund 6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24) Options: 1. Push 2. Pop Options: 1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara Salami Fund: 240 Options: 1. Push Options: 1. Push		
6. Exit Select your option: 3 The most eligible salami recipient: (Ripon, 24)  Options: 1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara  Options: 1. Push Options: 1. Push Options: 1. Push	· ·	7 1
Select your option: 3 The most eligible salami recipient: (Ripon, 24)  Options:  1. Push 2. Pop Options: 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara  Options: 1. Push Options: 1. Push Options: 1. Push		Salaini Fund. 240
The most eligible salami recipient: (Ripon, 24)  1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 7. Current Salami Fund 7. Current Salami Fund 8. Exit 8. Count juniors 9. Current Salami Fund 9. Current Salami Fund 9. Current Salami Fund 9. Exit 9. E		Ontions
Options:  1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 7. Current Salami Fund 7. Count juniors 8. Current Salami Fund 8. Exit 8. Count juniors 9. Current Salami Fund 9. Current S	* *	*
Options:  1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 7. Current Salami Fund 7. Current Salami Fund 8. Exit 8. Count juniors 9. Current Salami Fund 9. Exit 9. Current Salami Fund 9. Current Salami Fund 9. Exit	The most engine saiann recipient. (Kipon, 24)	
1. Push 2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 4. Count juniors 5. Current Salami Fund 6. Exit 8. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara  4. Count juniors 5. Current Salami Fund 6. Exit Coptions: 1. Push	Ontions	
2. Pop 3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit 5. Current Salami Fund 7. Current Salami Fund 8. Exit 8. Exit 8. Exit 8. Exit 8. Exit 8. Exit 9. Options: 1. Push	*	
3. Peek 4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 2 Ripon received 100 taka as salami Options: Enter name: Zara Options: 1. Push		J.
4. Count juniors 5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara  Select your option: 2 Ripon received 100 taka as salami Options: 1. Push	•	
5. Current Salami Fund 6. Exit Select your option: 1 Enter name: Zara  Ripon received 100 taka as salami Options: 1. Push		
6. Exit Select your option: 1 Enter name: Zara Options: 1. Push		
Select your option: 1 Options: Enter name: Zara 1. Push		Ripoli received 100 taka as salailii
Enter name: Zara 1. Push		Ontions
		•
	Enter batch. 24	*
Options:  3. Peek 4. Count juniors	Ontions	
^	*	
2. Pop  6. Exit Select your ention: 4	•	
3. Peek  4. Count juniors  Select your option: 4		Select your option: 4
4. Count juniors  The number of Juniors and Eriends who		The number of Junious and Esternia
5. Current Salami Fund  The number of Juniors and Friends who		
6. Exit received salami are:		
Select your option: 1 CSE 23 ->1		
Enter name: Azmain  CSE 24 ->1  CSE 25 > 0		
Enter batch: 23 CSE 25 ->0	Enter patch: 23	
CSE 26 ->0		CSE 26 ->0

Marking Criteria	Marks	Marking Criteria	Marks
Push()	10	Peek()	02
Pop()	03	ConuntJuniors()	04
CurrentSalamiFund()	01		