

January 2023 CSE 108

Online on Java

Time: 30 minutes
Subsections C1 & C2

Suppose the organizers of the CSE Fest have announced a new rule for registration. When a student wants to register for an event and the event is already filled with its maximum count of participants, the student will be put on a waiting list. Each event will have its own waiting list, and it can hold as many students as per the registration requests. The waiting students will not be readily registered. Every time an existing registration has been canceled for an event, the students waiting in its list will be drawn in a FIFO (First In, First Out) fashion, immediately registering the student who has been drawn. You need to implement the waiting list for the events.

See the Sample I/O for further clarification.

Sample I/O

Input	Output
1 Hackathon 2023-07-23 ECE Building 10	Event added successfully!
1 IUPC 2023-07-27 ECE Building 1	Event added successfully!
1 Game Jam 2023-07-22 ECE Building 2	Event added successfully!
2 Mr. D 202105011 IUPC	Student 202105011 has been registered to IUPC

2 Mr. A 202105001 IUPC	Total participant count for IUPC exceeds maximum count. Putting 202105001 on waiting list.
2 Mr. E 2021050071 IUPC	Total participant count for IUPC exceeds maximum count. Putting 2021050071 on waiting list.
2 Mr. Z 2021050171 IUPC	Total participant count for IUPC exceeds maximum count. Putting 2021050171 on waiting list.
2 Mr. Z 2021050171 IUPC	Student 2021050171 is already waiting to be registered for IUPC.
2 Mr. G 20210500181 IUPC	Total participant count for IUPC exceeds maximum count. Putting 20210500181 on waiting list.
4 IUPC	Name : IUPC Date : 2023-07-27 Location : ECE Building Registered Participants : Name: Mr. D, Id: 202105011 Waiting Participants : Name: Mr. A, Id: 202105001 Name: Mr. E, Id: 2021050071 Name: Mr. Z, Id: 2021050171 Name: Mr. G, Id: 20210500181
2 Mr. A 202105001 Hackathon	Student 202105001 has been registered to Hackathon
2 Mr. B 2021050061 Hackathon	Student 2021050061 has been registered to Hackathon
4 Hackathon	Name : Hackathon Date : 2023-07-23 Location : ECE Building Registered Participants : Name: Mr. A, Id: 202105001

	Name: Mr. B, Id: 2021050061 Waiting Participants :
2 Mr. H 2021050100 Game Jam	Student 2021050100 has been registered to Game Jam
2 Mr. D 202105011 Game Jam	Student 202105011 has been registered to Game Jam
2 Mr. A 202105001 Game Jam	Total participant count for Game Jam exceeds maximum count. Putting 202105001 on waiting list.
4 Game Jam	Name : Game Jam Date : 2023-07-22 Location : ECE Building Registered Participants : Name: Mr. H, Id: 2021050100 Name: Mr. D, Id: 202105011 Waiting Participants : Name: Mr. A, Id: 202105001
7 202105001	Student 202105001 is registered in : 1. Hackathon Student 202105001 is in waitlist for : 1. IUPC 2. Game Jam
8 202105011 IUPC	Student 202105011 is successfully removed from event IUPC Student 202105001 has been registered to IUPC
4 IUPC	Name : IUPC Date : 2023-07-27 Location : ECE Building Registered Participants : Name: Mr. A, Id: 202105001 Waiting Participants : Name: Mr. E, Id: 2021050071 Name: Mr. Z, Id: 2021050171 Name: Mr. G, Id: 20210500181

7 202105001	Student 202105001 is registered in : 1. Hackathon 2. IUPC Student 202105001 is in waitlist for : 1. Game Jam
9	Terminating...