

REPORT

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Question-1

The approach used for this question is quite easy ,
I started off by creating a struct to store the Student ID(This was not stated in the question but as mentioned in the assignment pdf that we should implement fcfs hence Student ID helps us in ensuring fcfs is implemented),arrival time, Washing time ,Patience time.

Then using the inbuilt qsort function in c language I sorted the students according to their arrival time.

After this, I created threads for each incoming student using an array. In this thread declaration we have function corresponding to what each incoming student has to do. Student is a thread here. Now if the washing machine is empty when the student comes ,he starts using it (denoted by the sleep function here).Then cases are handles accordingly.

Then, I initiated a loop which goes on indefinitely until all the students have left the area.