IT-253: Operating Systems Laboratory Handout

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In today's laboratory there is evalaution of the assingments given. The evalautors and students' assignments are as follows:

171667IT144 to 181427IT110 : by Dr. B. Neelima
181220IT111 to 181017IT125: by Mr. Vinayaka
181299IT126 to 181436IT140: by Mr. Abhishek
181762IT141 to 181403IT154 and 181326IT238 : by Ms. Anjali
181875IT201 to 181190IT218: by Ms. Swathi
181418IT219 to 181471IT235 by Ms. Sujatha
181369IT236 to 181047IT254 by Ms. Deeksha

You can implement the excercises in any language but preferably in C. The evalaution is to be completed on the same day. Late submission is subject to the availability of the evalautors and there will be late submission marks deduction.

Excercise 1: Using Deterministic Modeling approach, analysis the three main algorithms namely: First-Come, First-Served (FCFS), Shortest-Job-First (SJF), Round-Robin (RR) for the following predetermined workload. Calculate the average waiting time, Turnaround time for each respective algorithm and determine which algorithm best suits for the given workload in the Table. 1 below.

Table: 1

PROCESS	BURST TIME	ARRIVAL TIME
P_1	10	0
P_2	29	1
P_3	3	2
P_4	7	3
P_5	12	4

Excercise 2: Implement fork() and exec() system calls using c for a process creation and get the parent id and child id of the processes created.