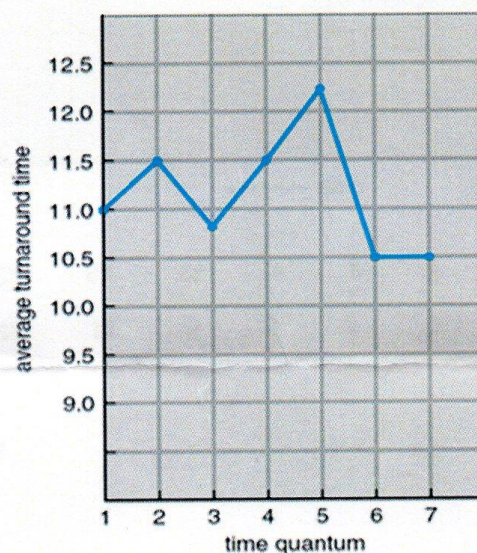


5.1 Write a program in any language (programming) to produce the curve in the following figure with input parameters:

(1) Process vs. Time (table) and (2) Time Quantum=1,2,3,4,5,6,7

$P_1=6, P_2=3, P_3=1, P_4=7$

Turnaround Time Varies With The Time Quantum



process	time
P_1	6
P_2	3
P_3	1
P_4	7

80% of CPU bursts should be shorter than q

5.2 Write a program to generate the curve that generalizes the curve in problem 5.1 with parameters, (1) Process vs. time

$P_i = T_i, i=1, 2, 3, \dots, n$

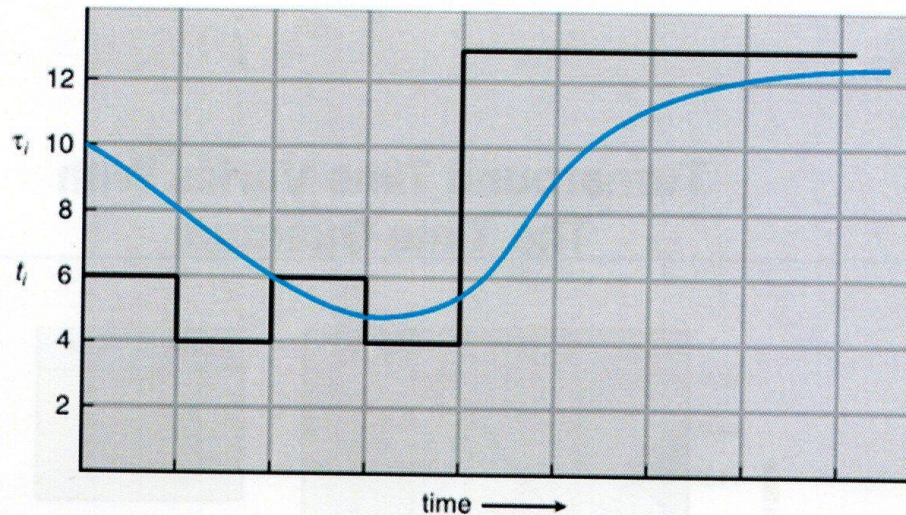
(2) Time Quantum

Time Quantum = 1, 2, 3, ..., m

Show the curve when n and m are fixed/decided

5.3 Write a program to generate the curve in blue/green color to predict the length of the next CPU burst in the following figure:

Prediction of the Length of the Next CPU Burst



CPU burst (t_i)	6	4	6	4	13	13	13	...	
"guess" (τ_i)	10	8	6	6	5	9	11	12	...

5.4 Generalize the problem 5.3 with CPU burst (t_i) and "guess" (τ_i) as the input parameters to produce the curve