

Q1) Write a program that creates two processes, a parent and child process where child is created via fork system call. The parent reads the content of file and send to child process via interprocess communication(IPC using shared memory). The child process processes the data and write result to another file. The input file consist of student data, name, registration number and attendance in 7 subjects and scholarship can be granted to students only if they have attendance above 75% in all subjects. Output file should contain students registration number, average attendance and scholarship granted or not.

Input file format:

Name	Reg. No.	Sub1	Sub2	Sub3	Sub4	Sub5	Sub6	Sub7
Jane Piper	19mcmt01	82.23	84.53	96.45	79.43	77.32	92.91	93.76
Joseph Gill	19mcmt02	74.00	73.98	77.23	75.00	76.76	68.02	78.01

Output file format :

Registration Number	Average attendance	Granted or not granted
19mcmt01	86.66	Granted
19mcmt02	74.71	Not Granted