

B2 (Sunday 11 AM)

Write two system calls with the student's names (say, if your name is Papachari Atta, one system call will have the name "papachari", the other will have "atta". All in lowercase), one will return the student ID and another will return a random number. Also Write a user program named **testb2** that would invoke the two system calls and do the following:

- a. Add the digits of the Student ID
- b. Mod the sum with the random number
- c. Output the Student ID, Sum, Random Number, and the Remainder.

For random number generation, use the following function:

$$X_{n+1} = (aX_n + c) \bmod m$$

where X is the sequence of pseudo-random values

For your case, use these values:

m= your student id

c=11, a=5, $X_0 = \text{student_id}$, n=500