21AIE112 Elements of Computing Systems-II
Assignment 7

Date: 16/05/2022   Due Date: 31/5/2022

❑   Course Outcomes

❖   CO1: Elaborate the important components of a MIPS computer system and the basic   organization

❖   CO2: Implement and execute low-level programming on the hardware platform

❖   CO3: Develop and test programs in object-based language 'Jack'

❖   CO4: Practice experiments related to basic concepts and functions of operating systems and compilers.

❑   **Answer all Questions**

General Instructions to Students:

Write the Jack program of the given task and Compile and successfully simulate it on VM emulator

1. Write a Jack program to execute the following equation
    If $n \leq 10$, $y = \Sigma\, n$
    Else $y = \Sigma\, n^2$

2. Write a Jack program which counts up to 30 sec and automatically resets to 0
3. Write a Jack program to find the sum of prime numbers from 50 to 100
4. Write a brief description of the various Jack OS Services