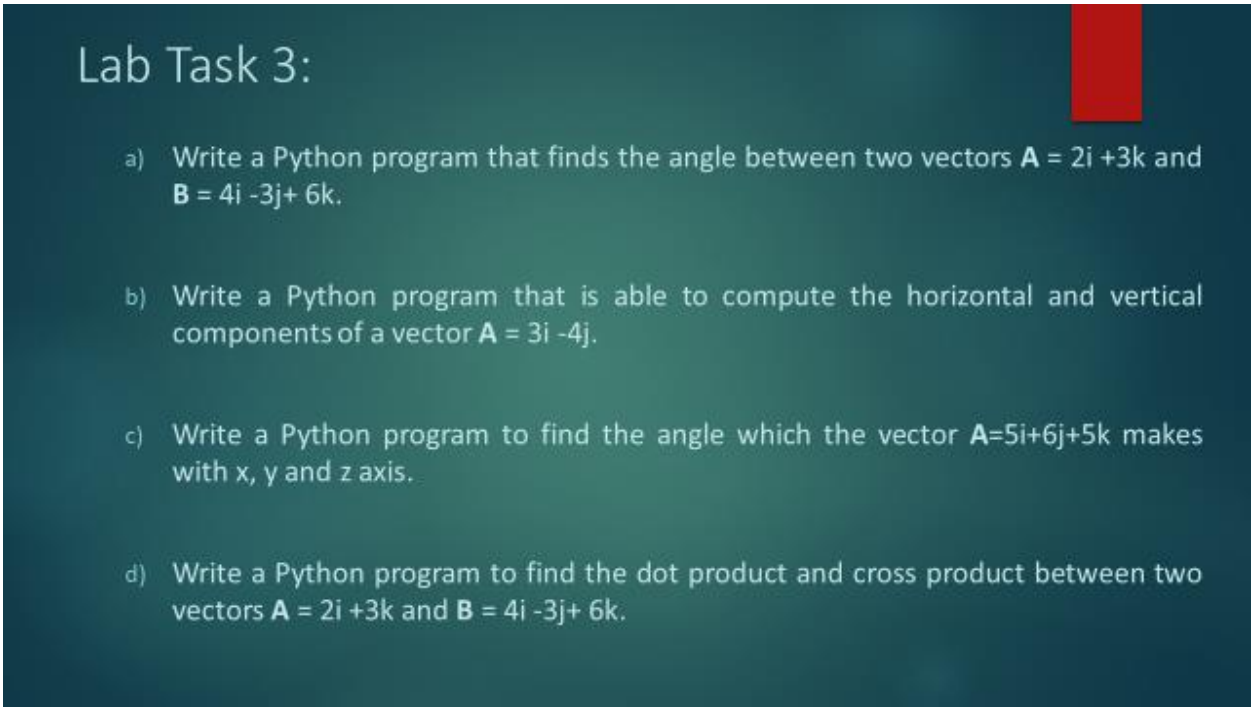
National University of Computer and Emerging Sciences | **NS 1001 Applied Physics**
Karachi Campus | **Fall 2021**
Department of Computer Science | **CS-1D**
Lab Task #3

Name: _____ **Total Marks :30**

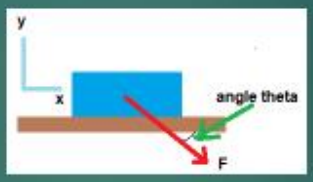
Roll No. :

Instructions:

- Take the screen shots of all your tasks and their outputs and make a single pdf file.
- Upload the single file in pdf format on google classroom.
- Also upload the ipynb or text file that contains the code



e. Consider a sample problem: A tilted applied force, which requires that we work with components to find a frictional force. Figure shows a force of magnitude F = 12.0 N applied to an 8.00 kg block at a downward angle of θ = 30.0°. The coefficient of static friction between block and floor is μ_s = 0.700; the coefficient of kinetic friction is μ_k = 0.400.



Write a python function that determines whether block is stationary or is sliding.

f. Write a python program that solves question 29 part a and b chapter 6, end of chapter problems from your textbook.