UNIVERSITY OF JOHANNESBURG

FACULTY OF SCIENCE

COMPUTER SCIENCE 1A **SAMPLE DESIGN**

Problem Description

Write a C++ program that will get the Semester test mark and the total possible marks from the user. Then take the mrks and calculate the percentage. If the mark is below 50% display "You need to invest more time in your school work" and if its above it should display "Keep it up."

Input & Output

Input	
Input Description	*Mechanism*
Semester Mark	Standard input steam
Semester Total Mark	Standard Input stream
Output	
Output Description	*Stream (optional)*
Total Percentage	Standard output stream
Text to display	Standard output display

Data Format

Identifier	*Data Type*	*Description*
B_STMrk	Double	Users semester test mark
B_STTtlMrk	Double	Total possible for test
B_PercST	Double	Percentage mark

Pseudo Code

B_STMrk ← User input
B_STTtlMrk ←User input

B_PercST ←B_STMrk / B_STTtlMrk * 100
Display B_PercST

If B_PercST is above 50
  Output →"Keep it up"

If B_PercST is below 50
  Output →"You need to invest more in your schoolwork"

UML Activity Diagram