NATIONAL UNIVERSITY
OF COMPUTER & EMERGING SCIENCES
PESHAWAR CAMPUS

ASSIGNMNET-2

INSTRUCTIONS:

Please keep the following in mind:

- Do not share your code with anyone else.
- Comment Every Line of Code.
- You must submit the **.c** files only. Make sure you name as rollno_name_dept_sec.c
- For example: **P23_1234_Name_CS_1C.c**
- Make sure you follow the naming schemes of the **.c** files correctly. Failure to do so will result in getting **ZERO.**
- No submissions other than **Classroom** will be entertained.
- Make sure your code compiles and runs. If a piece of code fails to compile, you'll be given a **ZERO.**
- All submissions will be checked for plagiarism. You are not allowed to copy code from the internet or any other individual.
- Any sort of plagiarism will lead to **ZERO.**
- **EMAIL: p200128@pwr.nu.edu.pk/p200025@pwr.nu.edu.pk for any queries. WhatsApp messages will lead to ZERO.**

1. Basketball Court

Consider that Ali has just purchased a plot in Hayatabad of width “plot_width” and length “plot_length”. Ali is a well-known basketball player in FAST NUCES. Ali wants to enhance his basketball skills. Therefore Ali wants to convert that to a basketball court. For that, Ali first has to install tiles on the plot. The tiles Ali has purchased have width “tile_width” and length “tile_length”. Consider that the plot’s surface is already leveled and is ready for tiles installation. Ali is also too conscious about the basketball court. Ali doesn't want to break the tile into pieces either it is fully fit or it is not fit in the plot area.

1.1 Tasks to do.

There are two main tasks to complete:

1. Write a function with the name “**checkTilesFit**” which takes in four inputs (**plot_width, plot_length, tile_width, tile_length**) and checks the tiles with the length and width given in the parameter fit into the area of the plot, If yes then this function return **1** else this function return **0**.

2. Finally, write a function with the name “**calculateTiles**” that takes in four inputs (**plot_width, plot_length, tile_wdith, tile_length**) and returns the number of tiles required to cover the whole plot without breaking the tiles.

- The number of tiles should be an **integer** not a **float**.

You need to return the number of tiles after calculating the number of tiles if they fit, else you have to return **0**.

Hint is on the next page.

Hint: Try to do yourself, do some simple math’s and do not break the math’s rules 😀.