

*Mid-Term Exam*

*Part-1*

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| **Instructor:** | *Simrandeep Kaur* |
| **Class:** | *AML 1204\_2* |

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| *Read all questions carefully.*   * *Partial marks may be awarded where appropriate.* * *Time allowed:* * *No cell phones allowed.* * *Once you have Test paper, you cannot leave Room.* * *Upload on Moodle with screenshot of o/p and source code* * *Total marks: /10 Marks* |

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| **Date:** | **July 07, 2021** |
| **Student Name:** |  |
| **Student Number:** |  |

We want to write an application that takes a student number and his or her grades in the following courses AML, Big Data, Networking, Cloud Computing and Python. calculates the final grade and assigns a mark to the grade (for example, if the final grade is 95, it will assign A+ as the mark). With this scenario in mind, proceed with the following deliverables.

**Part-1 (4 marks)**

Write a function and call it **final\_grade\_calculator**. Your function accepts the following variables:

* studentNumber
* amlGrade
* bigDataGrade
* networkingGrade
* cloudComputingGrade
* pythonGrade

Now, add logic to your function to calculate the value for the finalGrade variable by using the following weighting:

* amlGrade with a weight of (100%)
* bigDataGrade with a weight of (100%)
* networkingGrade with a weight of (100%)
* cloudComputingGrade with a weight of (100%)
* pythonGrade with a weight of (100%)

Write a print statement to print the studentNumber and the calculated finalGrade .

**Part-2(4 marks)**

Define a function and call it **mark\_assigner**. The function takes a studentNumber and also the finalGrade and uses the following table to assign a mark (A+, A, A-.B+,...) based on the finalGrade that is passed to the function. The function returns the assigned mark. (Hint you will need to use the if condition to assign the mark to the grade and use the return statement to return the assigned mark back to the caller of the function)

**Part-3(2 marks)**

After the print statement in your  **final\_grade\_calculator**function (the first function you wrote), add business logic to call the second function (the mark\_assigner function), and pass to it the stundetNumber and the calculated finalGrade and parse the result with a print statement. Test your program by passing your student number and fictional (imaginary) grades for your amlGrade, bigDataGrade, networkingGrade, cloudComputingGrade and pythonGrade(Assume you have got different grades on each assessment) and adjust your initial print statement to deliver the following desired output:

Student number C071234567  has achieved the final grade of 96 which is equivalent to A+

**Delivery:**

**Attachment1)** Save your code in a .py file with name format of stundetNumber\_AML1204\_S2021\_Midterm.py

Make sure to replace studentNumber in the filename with your real student number, so if your real student number is c071234567, your file should be called c071234567\_AML1204\_S2021\_Midterm.py and then submit it.

**Attachment2)**Run your code on your computer and grab a screenshot of its successful execution and then save the screenshot in an image file with the following naming convention:

stundetNumber\_AML1204\_S2021\_Midterm.png or stundetNumber\_AML1204\_S2021\_Midterm.jpg

**Important Note:** Please make sure your code runs, you will lose significant marks for this portion if your code has errors.