Name:Click here to enter text.

You need to select **only 1** of the assessment challenges.

To complete the challenge you need to carry out abstract and decompose, produce a flowchart or flowcharts. You will then code it using Python. You need to evidence your code and comment on it in this assessment document. You have **2 hours** to complete your challenge.

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**Zuckerberg** **Lovelace** **Turing**

Create a system that will repeat the following; as many times as the user would like: (Ask for a class size)

Allows a user (teacher) to input a student name and the exam percentage of a test into the program,

It will then output their name and grade (1-9 including a U.)

e.g. 87 gets entered in and the system responds with: Your grade = 9

(The type of loop is up to you, both will work)

Create a system that allows a user to input their exam percentage into the system, it will output their grade 1-9 including a U.

e.g. 15 gets entered into the system and the computer responds with: Your grade= 1

or 87 gets entered in and the system responds with: Your grade = 9

Create a basic bingo card by selecting 10 random numbers 1,99 to be the users game card.

These will be added to a list

Then call out the numbers until all of the numbers in the game card have been entered.

The program should then calculate the amount of balls called.

If less than 45 balls were called they won, otherwise they lost.

Help:

Adding to list:

listname.append(variable)

Removing from list

Listname.remove(variable)

**Max Mark = 34 Max Mark = 50 Max Mark = 68**

I have chosen to attempt challenge**;** Choose an item.

**Decompose**

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| |  | | --- | | **Abstract the important information and decompose the problem to list key instructions or**  **use structured English/pseudocode to plan your code.** | |  | |

**Flowchart**

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| --- |
| Ctrl+ [**Click here to create the algorithm.**](https://www.draw.io/) **DRAW.IO**  (Don’t forget to file > save as .xml to be used again and file > export jpeg >download to save image  (Alternatively you can printscreen/screen clip your flowchart)  **Create the algorithm or algorithms and paste/insert them into the area below.** |
|  |

**Remember:**

Syntax error is missing ( : “ etc. usually on the line before it picks it up

Other errors – runtime is caused by int or str needing to be changes or variable names etc. being different.

**Project evidence**

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| |  |  | | --- | --- | | Code | Result | |  |  | | Comment on the code. – This is your chance to explain your code  The use of keywords and good use of literacy will be assessed. | | |  | | |

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| |  |  | | --- | --- | | Code | Result | |  |  | | Comment on the code. – This is your chance to explain your code  The use of keywords and good use of literacy will be assessed. | | |  | | |

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