# **Program Instructions**

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NOTE\*: This program can only run on a Windows Operating system with Excel.

## Program Description:

*The intention of this program is to take import a database of school grades and analyzes them based on a chosen course. The averages, minimum, maximum and standard deviations for the various evaluations held in each course is calculated. Additionally, histograms for each course will be calculated. All the summarized information will be saved to the "Report.docx".*

## Step 1 – Open the File

*From the folder view double click and open the assignment file*

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## Step 2 – Ensure Macro’s are Enabled

*Before beginning to ensure Macro’s are enabled in the workbook. This can be done in two steps.  
1) File > Options > Trust Center > Trust Center Settings… > Macro Settings >* *Enable VBA macros*

*2) Right Click On The File > Properties > Unprotect*

## Step 2 – Run the Program

*From the “Program Run” sheet click the “Run Program“ button should prompt the opening of the first userform for the program.*

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## Step 3 – Select the School Grades Database

From the userform click the Browse button. This will open a window that allows the user to select the relevant grades Microsoft Access database, in this case the file should be named “Registrar” located within the same folder as the workbook. Select the database and click the “Open” button. This will populate the textbox within the userform with the file path of the selected database. From here the user can continue to the next step by clicking the continue button.

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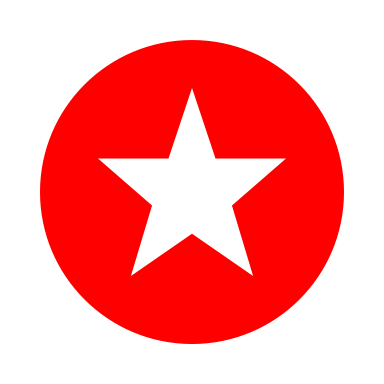
## Step 4 – Importing the Data

*After pressing the continue button another userform will be opened and a listbox with the various courses available for analysis will be displayed. From the various options select a course you would like to analyze and press the select button. Your current selection will then populate the textbox. Next press the import button to import the grade data from the selected course into a new worksheet. This button will also calculate the relevant averages, minimums, maximums, standard deviations and associated histograms of each assignment (See the Star Icon for a screenshot of an example output).*

*\*****Please note bin width of each histogram is set automatically by Excel and cannot, be manipulated using VBA for versions of Excel beyond 2016. Although untested if used on a version of excel earlier than 2016 the bin width should be set to 5\****

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## Step 5– Generating the Word Document

After completing the previous steps in succession, the program is now ready to generate a word report by clicking the button labeled “Generate Word Report” (Note this may take a moment to execute). This will populate the “Report.docx” report within the “Assignment 5” with the summarized data and save/close the word document.

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## Step 6 – Conclude the Program

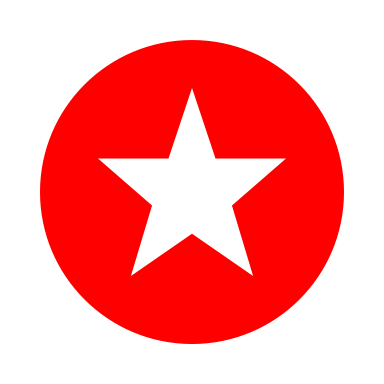
After the data has been populated to the “Report.docx” word document the program can be concluded by selecting the “Close Program” button. This will close the active sheet and make the program available to run again.

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## Step 7 – Review Results

From here the user can processed to open the “Report.docx” report within the “Assignment 5” folder to manually view the results in a word doc (See the Star Icon for an example output of a word report).

**\*Ensure you close the word document before rerunning the program to avoid error by attempting to open a word doc in VBA that is already open\***

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