A. A point-form list of the steps required to create a new project in Visual Studio, add new files, compile and run a command line program.

#### **New Project**

- File
- New
- Project

#### **Add New Files**

- In the solution explorer window on the right hand side.
- Right click on the heading of type of file you would like to add.
- Click "Add"
- Click "New Item"

#### **Compile and Run Command Line Program**

- Add a new source code file.
- Add the following code or any working code.

```
int main()
{
    return 0;
}
```

- Click the debug menu.
- Click start without debugging.
- B. A point-form list of the steps required to create a break-point location in the program, and run the program in using Visual Studio's Integrated debugging system so that program execution stops at the nominated point.
  - On the left hand side of the editor, there will be a set of line numbers.
  - To the left of the line numbers, there is a slight colour change (usually gray for standard white theme) which runs vertically with the numbers.
  - Click in this section and a red filled circle will appear. This has set a break point in the code.
  - For the program to stop at this line, ensure that you run with debugging.

# C. Note how to inspect the value of variables during debugging

- Debug a program until it reaches a breakpoint.
- In the bottom left hand corner of the screen, there should be a window called "Autos". If there isn't, Press Ctrl+Alt+V then A. To enable this window.
- You can now see the value of the variables which are in scope.

Spike No.: 3

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# Goals / deliverables:

Comparison Report

# Technologies, Tools, and Resources used:

- Visual Studio 2017 IDE
- Canvas

### Tasks undertaken:

- Writing down all the functionality with knowledge gaps (new project, new files, debugger etc.).
- Search help section to ensure the different ways
- Write down easy to understand steps for report.

# What we found out:

I found out how to use the Visual Studio IDE effectively to create projects, work with different files/resources and use the debugger in order step through the software so as to watch how the code manipulates the underlying data so one can find errors.