There are 20 questions in the final Quiz pool and you can choose 10 or more questions as you experience and progress with programming hands-on. The task is to write a simple payroll program which contains the following 5 programming concepts: input (cin), output (cout), loop (while), decision making (if-else), data file (ifstream).

The requirements for the Programming Quiz is to have a personal experience which elaborate and demonstrate understanding of programming concepts.

For each of 10 or more questions (steps) add the snapshots by ctrl + prnt scrn and paste it (ctrl + v) to a word document for submission. Each question is worth 10 points

- 1) You need a language compiler to write a program for example C++ compiler. What is a language compiler and how would you download it. Answer the question and paste your snapshot(s) as evidence. ( +10 points)
- 2) How would you activate (start) the compiler and make a new file? Answer the question and paste your snapshot(s) as evidence +10 points
- 3) Write the simplest possible program (maximum 8 lines of code) which displays only your payroll's company name- which includes your name. Make sure your program is not completely correct. Answer the question and paste your snapshot(s) as evidence +10 points
- 4) How would you compile your simplest payroll program? Answer the question and paste your snapshot(s) as evidence +10 points.
- 5) How would you fix the syntax errors and add the necessary steps so that there would not be any syntax errors. At the end of trial and error, your program should include the followings that makes the basic block of any C++ program:

```
#include <iostream>
using namespace std;
main(){
cout <<" .."<<endl;
system ("pause");
return 0;}</pre>
```

Answer the question and paste your snapshot(s) as evidence +10 points.

- 6) How would you run the program and view the display-output (after the successful compilation).
- 7) What is the C++ statement responsible for the output display and add the new display statement to the existing program requesting "ENTER EMPLOYEE ID". Compile and run your program.
- 8) What is the statement that accepts (grabs) the input from the user (input entry)? Add the variable names (hw, hr) and declare it appropriately (int and float). Compile and run. Add other cout and cin to your program. Compile and run and get +10 points
- 9) Add the operation to compute the grosspay and display all the previous information (data) and the grosspay.

Make sure to declare a variable name for the grosspay with appropriate data type. Compile and run.

- 10) Loop the existing program for as many duration as possible for example infinite loop (forever)
- 11) How do you add a decision to your program to compute the taxrate?
- 12) How do you create a data file instead of typing it interactively?
- 13) How would crash your program
- 14) How would you make a logical error
- 15) Show me the 10 keywords of C++
- 16) How would run your program with whatever data you have
- 17) Extend your program to solve more problems such as adding overtime or fix your tax rate in better way.
- 18) How to make a Search program for the payroll which becomes for anything else (search engine building block)
- 19) what are the programming mysteries?
- 20) Change the program to do something else by simply changing the names and the operations (magical part).