**Assignment one. (5/2/2024)**

***Qn1. Is python used in frontend or backend?***

Python is used in backend because it is responsible for the behind-the-scenes work that it takes to build the structure and logic of a website or any program. Python is both backend and frontend but it is widely used as backend.

***Qn2. What is git and the use of git in python***

Git is an open source distributed version control system that keeps track of projects.

Git helps save changes in the projects, enables collaboration between many developers and also enables code sharing.

***Qn3. What are the tools used for software development in python?***

* PyCharm
* Keras
* SciPy
* Pip package

***Qn1. What is Git in software development.***

* It is an open source distributed version control system that keeps track of projects.
* It also helps save changes in the projects.
* It as well enables collaboration between many developers.
* It also enables code sharing.

***Qn2. What are the steps for connecting a project on a computer to Github.***

1. Open terminal from the editor.
2. Then change the current working directory to the local repository.
3. Stage the file to the local repository.
4. Commit the files that have been added to the local repository.
5. Then add the remote origin.
6. Then finally push the changes from the local repository to Github.

***Qn3. What are the three main types of variables in python***.

* Integer
* Strings
* Boolean
* Float

**Assignment four. (5/2/2024)**

***Qn1. What is the difference between parameter and argument in a function.***

An argument is a value passed to a function when calling the function while a parameter is a named entity in a function that specifies an argument that then function can accept.

***Qn2. What is the use of return in a function?***

Return is a statement used to end the execution of a function call.

**Assignment six (7/2/2024)**

**Qn1. How do we use list comprehension in python**

List programming is an important tool to create a new list by doing some kind of operations on a existing list. The for loop is used to create a new list from and existing list.

For example, if we want to create a new list with natural number then;

*Number= [ x+=x for x in range (1,11)]*

*Print(Number)*

**Qn2. How do we remove an element from a list using pop method.**

To remove an item using pop method, you first need to type the list name then add .pop and write the index of the item which you want to remove from the list.

For example, *number=[1,2,3,4,5,6]*

*number.pop(4)*

*print(number)*

**Qn3. How do we delete in a dictionary.**

The pop method is used to delete in a dictionary.

For example, *dict1={ ‘a’:1, ‘b’:2, ‘c’:3}*

*dict1.pop(‘b’)*

*Print(dict1)*