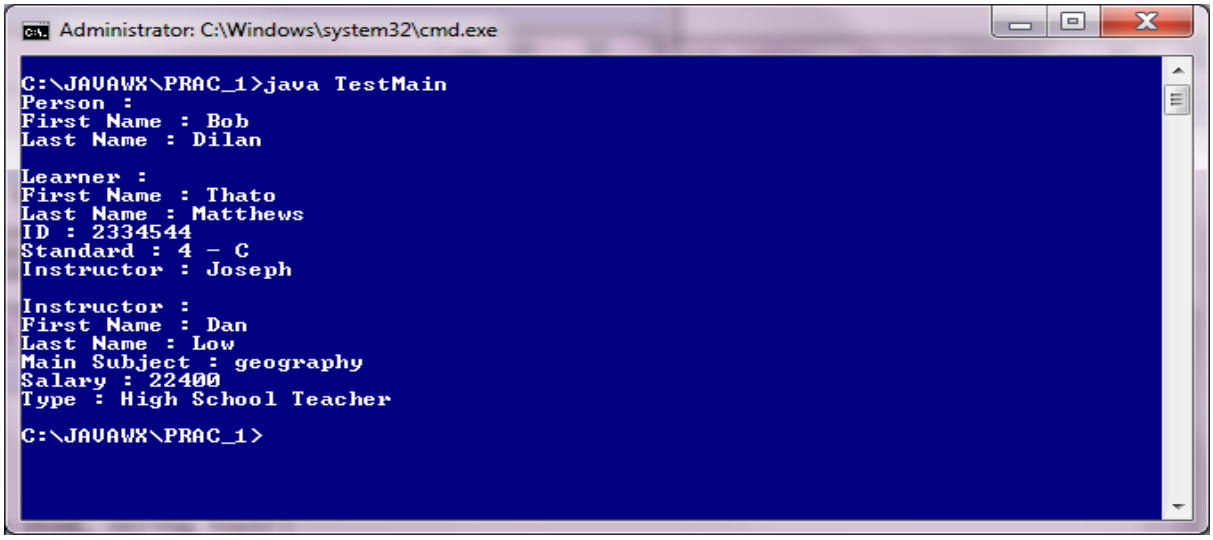
Assignment 1 2023

The purpose of this programming activity is to enable you to evaluate whether you acquired the OOP skills required for the rest of the module, focusing on ***class design, inheritance and polymorphism.***

In your career as programmer, you will encounter many topics to develop programs for which you have no knowledge of. Perhaps you will have to write a program on Agricultural products or Pharmacy medicines.

This assignment will not have specific instructions.
You must implement the following:

- Create your own example of a super class with two sub classes inheriting from the super class.
- Your example must include some common abstract method that allow the use of polymorphism in the test program.
- Note that all classes must have variables, constructors, accessors, mutators, toString and abstract methods.
- Your example must have a test program that use the created classes and demonstrate polymorphism as well as the implicit and explicit calling of the toString method.
- The output below is an incomplete example to guide you on how your output could be printed in the test program.
- Your example should not be of learner and instructor but can be of any real-life example.



Lecturers appreciate own attempts as simple as they might be. Do not Google your code! The submitted code will be checked for plagiarism.

Important rules for all assignments:

- **Only work submitted on eFundi will be marked.**
- **Only working code will be marked.**
- **Code will be checked for plagiarism.**

Remember this is not a group assignment.

Rubric Assignment 1		
Super class	Variables	**2**
	Accessors	**2**
	Mutators	**2**
	toString	**2**
	Abstract methods	**1**

Sub class1	Variables	**2**
	Accessors	**1**
	Mutators	**1**
	toString	**2**
	Abstract methods	**2**
Sub class2	Variables	**2**
	Accessors	**1**
	Mutators	**1**
	toString	**2**
	Abstract methods	**2**
Test	Array of superclass	**4**
	Add data	**2**
	toString implicit/explicit	**2**
	Nice output	**1**
	Difficulty of abstract methods	**6**
Total		**40**