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CS6003A

Module 05: Assignment 01 – Programming Project 05

Algorithm for Student Class Program

The first thing that I will do is create the “Student” class. The constructor method will take in name and age as parameters for the class.

In addition to this, I will create a display method for the class that prints out statements representing the name and age of a given student.

Next, I will make a child class called “Engineer” inheriting from the “Student” class. This will take courses as a parameter in addition to name and age. Before defining an object for the new parameter, I will call the parent’s constructor method.

I will also create a display method for the engineer student class that prints out statements representing the name, age, and course of a given engineering student.

After this, I will make another child class called “Doctor” inheriting from the “Student” class. This will take hospital as a parameter in addition to name and age. Before defining an object for the new parameter, I will call the parent’s constructor method.

I will also create a display method for the doctor student class that prints out statements representing the name, age, and hospital of a given doctor.

Finally, I will create a main method that creates two objects based on instantiations of both child classes (“Engineer” and “Doctor”). I will also call both child classes display methods using the objects I create. This will test that the methods work correctly.