Review of OOP

• Describe some features of a robot that are likely to be abstracted away in the code that we write for a robot?

Different subsystems, motors, encoders. They might all be abstracted to different objects.

• Describe ways that encapsulation is helpful in writing robot code.

After we built the complete 7407-robotpy-toolkit, the new programmers can call the library in their programs. They don’t necessarily need to know the exact procedure or code that is being implemented, they only need to know what they input and what will the library output. This simplifies a lot of things that made things easier. Also all the motors and encoders and everything we buy from other companies, the code for them were already written by someone else. We just have to call a simple function to run everything.

• Give an example of polymorphism in the robot code that we wrote today.

The teleopPeriodic is an inherited method from TimedRobot object. However, our robot need to be different from other TimedRobot so we override that by writing our own teleopPeriodic, which is a polymorphism.