Question 11

For this question, I simply started by making a class called restaurant. I created the pure virtual functions menu and name. The menu was required in the problem, and the name was just for organization purposes. I made the virtual function a string type since menus and names consist of words. Next, I made three child classes that inherit from the Restaurant class (serving as the parent class). This requires the child classes to inherit the virtual functions from the parent class. Therefore, in each child class, I made the constructor for name and menu, and simply returned strings with name and menu items in it. Then, I made a templated class Reader\_Robot that takes a reference to a specific child class object and returns the name of the specific child class object, and its menu. In main, we have to create the objects of each of the child classes, and then printed a call to the Reader\_Robot class with type Restaurant (because we are using that class to make an object) and passing in the objects we made. The Reader\_Robot will look at which child class the object is from and return the name and menu for us.