

Lab 12 Worksheet

due in class on Monday, October 11th

10/10/21

Name: *Matthew E.*

Class section: 7

1. Define a **Student** class that maintains data for the name, graduation year, and major of a student. Your class should include the following methods:
 - A constructor that takes a name and a graduation year. It also sets the student's major to initially be **"Undecided"**.
 - A *getter* method for every class variable.
 - A *setter* method for every class variable.
 - A **toString()** method that returns a string summarizing a student's name, graduation year, and major.

```
class Student(object):

    def __init__(self, name, gradYear):
        self.name = name
        self.gradYear = gradYear
        self.major = "Undecided"

    def getName(self):
        return self.name

    def getGradYear(self):
        return self.gradYear

    def getMajor(self):
        return self.major

    def setName(self, name):
        self.name = name

    def setGradYear(self, gradYear):
        self.gradYear = gradYear

    def setMajor(self, major):
        self.major = major

    def toString(self):
        return "%s, year of %i: majoring in %s" % (self.name, self.gradYear, self.major)
```

2. Define a **main** program that creates a *Student* object to represent you. Set your major to an appropriate value. Then use the **toString()** method to print a summary about you.

```
def main():  
    myStudent = Student("Matthew Erdman", 2023)  
    myStudent.setMajor("Computer Science")  
    print(myStudent.toString())
```

```
>>> import student  
Matthew Erdman, year of 2023: majoring in Computer Science
```