Problem 10.3 UML Diagram

MyInteger
-value: int
+MyInteger(value:int) +getValue(): int +isEven(): boolean +isOdd(): boolean +isPrime(): boolean +isEven(value: int): boolean +isOdd(value: int): boolean +isPrime(value: int): boolean +isEven(value: MyInteger): boolean +isOdd(value: MyInteger): boolean +isPrime(value: MyInteger): boolean +equals(value: int): boolean +equals(value: MyInteger): boolean +parseInt(chars: char[]) +parseInt(str: String)

Problem 10.5 UML diagram

StackOfIntegers
-size: int
+StackOfIntegers(int, capacity) : int +push(int, value) : int +pop(): int +peek(): int +empty(): boolean +getSize(): int

Problem 10.9 UML diagram

Course
-courseName
+addStudent(): string +getStudents(): string +getNumberOfStudents(): int +getCourseName(): string

```
-dropStudent(student): string
dropStudent(index): int
-clear()
-findStudent(student): int
```

Problem 10.11 UML diagram

Circle2D
-x: double -y: double -radius: double
+Circle2D() +Circle2D(x: double, y: double, radius: double) +getX(): double +getY(): double +getRadius(): double +getArea(): double +getPerimeter(): double +contains(x: double, y: double): boolean +contains(Circle2D: circle): boolean +overlaps(Circle2D: circle): boolean

Problem 10.23 UML diagram

MyString2
-s: string -MyString2: string
+compare(): int +substring(): int +toUpperCase() +toChars(): char