

```
*CreatingAPencil.java  *Pencil.java x
1  /*
2   * Jack Utzerath
3   * CST-105 (9am)
4   * Assignment
5   * Dec 16, 2021
6   * This is my work
7   */
8  package pencil;
9
10 public class Pencil {
11
12     //Initialize the attributes
13
14     private double pencilCost;
15     private int pencilColor;
16
17     //Build First Constructor
18
19     public Pencil()
20     {
21         this.pencilCost = 0.0;
22         this.pencilColor = 0;
23     }
24
25     //Build Second COnstructor
26     public Pencil(double pencilCost, int pencilreturnColoror) {
27         super();
28         this.pencilCost = pencilCost;
29         this.pencilColor = pencilreturnColoror;
30     }
31
32     //Getters and Setter
33
34     //get Pencil Cost
35     public double getPencilCost() {
36         return pencilCost;
37     }
38
39     //set pencil cost
40     public void setPencilCost(double pencilCost) {
41         this.pencilCost = pencilCost;
42     }
43
44     //set pencil returnColoror
45 }
```

```
44 //get pencil returnColoror
45 public int getPencilColor() {
46     return pencilColor;
47 }
48
49 //set pencil returnColoror
50 public void setPencilColor(int pencilreturnColoror) {
51     this.pencilColor = pencilreturnColoror;
52 }
53
54 //-----
55
56 //toString() method
57
58 public String toString()
59 {
60     int color = getPencilColor();
61     String returnColor = null;
62
63     if (color == 0)
64     {
65         returnColor = "Green";
66     }
67     if (color == 1)
68     {
69         returnColor = "Blue";
70     }
71     if (color == 2)
72     {
73         returnColor = "Yellow";
74     }
75     if (color == 3)
76     {
77         returnColor = "Purple";
78     }
79
80     String returnString = String.format("Pencil Color: %s", returnColor);
81
82     return returnString;
83 }
84
85
86 }
```

```
*CreatingAPencil.java x Pencil.java
44     } while (working);
45
46     return 0;
47
48 }
49 //-----
50
51 private static String getLeadSize(int number)
52 {
53     String pencilSize = "";
54
55     switch(number)
56     {
57         case 1: pencilSize = "0.2 mm";
58             break;
59         case 2: pencilSize = "0.5 mm";
60             break;
61         case 3: pencilSize = "1.15 mm";
62             break;
63         case 4: pencilSize = "3.2 mm";
64             break;
65         case 5: pencilSize = "0.4 mm";
66             break;
67
68         default:
69
70     }
71     String returnString = "All pencils will have a lead size of " + pencilSize;
72
73     return returnString;
74 }
75
76 //-----
77
78 private static double randomNumber()
79 {
80
81     double min = 5.00, max = 35.00;
82     Random randomObj = new Random();
83
84     double randomValue = min + (max - min) * randomObj.nextDouble();
85
86
87
```

```
*CreatingAPencil.java x Pencil.java
83
84     double randomValue = min + (max- min) * randomObj.nextDouble();
85
86
87
88     return randomValue;
89
90 }
91
92 //-----
93
94 private static double [] createPencils(double[] pencils)
95 {
96     Pencil otherClass = new Pencil();
97
98     for (int pencilColor = 0; pencilColor < 4; pencilColor++)
99     {
100         pencils[pencilColor] = randomNumber();
101
102         otherClass.setPencilColor(pencilColor);
103
104     }
105
106     return pencils;
107
108 }
109 //-----
110
111 private static void printResult(double[] pencils)
112 {
113     Pencil otherClass = new Pencil();
114
115
116
117     for (int j = 0; j < pencils.length; j++)
118     {
119         System.out.println("Pencil Price: $" + pencils[j] + "\t " + otherClass.toString());
120
121     }
122
123 }
124
125 }
126
```