

1.17

My code takes the int max and originally sets it to a. It then tests a against b and c to solve what the max is. The code with a 4th int is the same.

```
CS-2420 > J Assignment_01_17.java > Assignment_01_17
5 public static int max(int a, int b, int c) {
6     int max = a;
7     if (max < a){
8         max = a;
9     }
10    if (max < b){
11        max = b;
12    }
13    if (max < c){
14        max = c;
15    }
16    return max;
17 }
18
19 public static int max(int a, int b, int c, int d) {
20     int max = a;
21     if (max < a){
22         max = a;
23     }
24     if (max < b){
25         max = b;
26     }
27     if (max < c){
28         max = c;
29     }
30     if (max < d){
31         max = d;
32     }
33     return max;
34 }
```



Assignment_01_17.java

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL COMMENTS
Run: Assignment_01_17_Tester
\\jdk-20\\bin\\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\\Users\\east0\\AppData\\Roaming\\Code\\User\\workspac
eStorage\\8cae6f5504b120337a47413144867805\\redhat.java\\jdt_ws\\CS-2420_465cd918\\bin' 'Assignment_01_17_Tester'
Testing Max of 3 methods
Finished Testing Max of 3 methods
Testing Max of 4 methods
Finished Testing Max of 4 methods
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL COMMENTS
Please enter the age of the next 4 pretend students who come through the door:
20 21 19 17
The first prize goes to the person with the age of: 21, which, coincidentally, is the oldest person of first 3 people you e
ntered above
The next prize goes to the person with the age of: 21, which, coincidentally, is the oldest person of first 4 people you en
tered above
PS C:\\Users\\east0\\OneDrive\\Documents\\CS 2420\\CS-2420> 
```

Problem 1.20



Assignment_01_20.java

My code just test divides the number first and if it succeeds with dividing and getting a result over 0, it adds a letter to the string and subtracts the number so we do not repeat. This continues until the number gets to 0.

```
CS-2420 > J Assignment_01_20.java > Assignment_01_20 > convertToRoman(int)
3
4     public static String convertToRoman(int num) {
5         String numeral = "";
6         do{
7             if (num/1000 > 0){
8                 numeral = numeral + "M";
9                 num = num - 1000;
10            }
11        }while(num/1000>0);
12
13        do{
14            if (num/900 > 0){
15                numeral = numeral + "CM";
16                num = num - 900;
17            }
18        }while(num/900>0);
19
20        do{
21            if (num/500 > 0){
22                numeral = numeral + "D";
23                num = num - 500;
24            }
25        }while(num/500>0);
26
27        do{
28            if (num/400 > 0){
29                numeral = numeral + "CD";
30                num = num - 400;
31            }
32        }while(num/400>0);
33
34        do{
35            if (num/100 > 0){
36                numeral = numeral + "C";
37                num = num - 100;
38            }
39        }while(num/100>0);
40
41        do{
42            if (num/90 > 0){
43                numeral = numeral + "XC";
44                num = num - 90;
45            }
46        }while(num/90>0);
47
48        do{
49            if (num/50 > 0){
50                numeral = numeral + "L";
51                num = num - 50;
52            }
53        }while(num/50>0);
54
55        do{
56            if (num/40 > 0){
57                numeral = numeral + "XL";
58                num = num - 40;
59            }
60        }while(num/40>0);
61
62        do{
63            if (num/10 > 0){
64                numeral = numeral + "X";
65                num = num - 10;
66            }
67        }while(num/10>0);
68
69        do{
70            if (num/9 > 0){
71                numeral = numeral + "IX";
72                num = num - 9;
73            }
74        }while(num/9>0);
75
76        do{
77            if (num/5 > 0){
78                numeral = numeral + "V";
79                num = num - 5;
80            }
81        }while(num/5>0);
82
83        do{
84            if (num/4 > 0){
85                numeral = numeral + "IV";
86                num = num - 4;
87            }
88        }while(num/4>0);
89
90        do{
91            if (num/1 > 0){
92                numeral = numeral + "I";
93                num = num - 1;
94            }
95        }while(num/1>0);
96
97        return numeral;
98    }
99
100 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL COMMENTS

```
ocuments\CS 2420\CS-2420'; & 'C:\Program Files\Java\jdk-20\bin\java.exe' '--enable-previ
ew' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\east0\AppData\Roaming\Code
\User\workspaceStorage\8cae6f5504b120337a47413144867805\redhat.java\jdt_ws\CS-2420_465cd
918\bin' 'Assignment_01_20_Tester'
Testing Roman Numeral Conversion method
Finished Testing Roman Numeral Conversion method
PS C:\Users\east0\OneDrive\Documents\CS 2420\CS-2420>
```

```
Please enter another integer, or a negative number to quit
15
Your Roman Numeral number is: XV
Please enter another integer, or a negative number to quit
█
```

Run:
Run:
Run:
Run: