A+ Computer Science — FIND MAX PRIME

Lab Goal : This lab was designed to review basic class creation, method creation, matrices, nested loops, and searching.

Lab Description : Write a class that will randomly load a matrix with integer values that range from 1 to an upper bound, inclusive of the upper bound. Write a method to find a max prime. The max prime in a matrix is the prime number with the largest surrounding sum.

Sample Data :

```
20, 15, 50
15, 15, 75
7, 7, 100
```

Files Needed ::

MatrixSearch2.java
MatrixSearch2Runner.java

Sample Output :

```
  16  24  43  11  39   3   4   5  25  47  50  41  23  14  43
  36  49  45  33   2  12  14  24  10   3  38  15  34  25  48
  37  34   7  22  43  43  31  48  10  48   9  25  29  18   1
  14  46  11  19  27  12  38  32   2  16   1   8  14  34  39
   8  27   2  41   7  26   8  21  33   2  33  42  43  24   6
  48  26   8  32  26   6  26   4  37   2  25  46  21  31  14
   2  13  42   5  35  28   9  17  19  11   1  45  44  27  12
  21  20  21  34  50  44  36   2  29  36  26  25  35  33  38
  25  29  12  16   4  28  28  37  24  45  33  41  25  40  48
  48   4  44  17  27  13  44  47  15  13  31   7  20  25  10
  31  20  44  11  43  28  17  49  32  10  37   7  46  45  19
   4   1  29  31  34  26  43   4   5  23   8  49   2  44  49
  19   3  36  29   3  27  27  25  36  26  34  30  32  38  25
  25  26  46   5  50  15  33  12  36  29  39  22   8  21   6
   3   3   4  19   5  32  44  19  22   3   2  34  38  16  17
  17  50  17  30  22   4  35  38  31  26  21  12  32  29  31
  12  42   3  28  47  40  36  27  15  35   7  28  49  36  18
  45  25  35  24  33  36  41   1  11  50  18  35  37  28   7
  44  16  45  37   6  44   1  23  17  25  11  17  29  35  33
  17  23  20  22  23  32  48  13  45  30  23  43  11  47  34

Max Prime = 47


  15  52  31  48  45  20  30  38  34   6  41  71  50  74  32
  75  26  46  75  23  34  69  46  25  60  66  72  19  59  48
  23  35  22  27  34  64  14  10  13  56  16  26  17  61  72
  44  46  33  33  18  49  32  39  15  52  61  44  29  48  14
  56  11  59  57   8  42  59  69  38   8  21  57  69  45  12
  67  38  59   8  18  57  67  52  20  16  36  37   6  75  49
  66  52  35  36  59   9  64  13  18  19  66  74  71  71  11
  49  70  47  35  57  69   2   1   1  19  36  62  51  22  26
  29   7  10  33  64  75  62  64  69  67  45  70  70  59  51
  32  59  68   3  74  72  17  37  17  42  49  56  50  61  24
  49  44   9  74  60  61  60  25  29  66  10  55  43   8  43
  19  41  64  56  60  23  57  27  56  14  44  28  57  41  32
  28  41  19  70  67  42  21  63   5  27   8   2  35  67  16
  45  24  42  46  38  70  29  40  73  65  18   4  11  27  41
   1  40  32  40   2  26  23  12  17  14  39  21  19  41  62

Max Prime = 41


  80  43  81  79  29  75  53
  34  24  33  57  41  80  91
  28  77  23  58  56  77   7
  48  57  66  86   3  59  63
   8  29  78  27  43  88  92
  50  65  54  56  58  56  32
```

```
  41  66  73  67   9 100  94

Max Prime = 67
```