Mixed Messages: The While Statement

(Adapted from *Head First Java* by Sierra and Bates)

A short Java program is listed below. One block of the program is missing. Your challenge is to match the code on the left with the output you would see if the block were inserted in the shaded region.

|  |  |
| --- | --- |
| class Test  {  public static void main (String[] args)  {  int x = 0;  int y = 0;  while (x < 5)  {     |  | | --- | | *Code goes here* |   System.out.print ( x + “ ” + y + “ ” );  x = x + 1;  }  }  } |

|  |  |
| --- | --- |
| **Possible code** | **Possible output** |
| 1. y = x – y; | 1. 02 14 25 36 47 |
| 1. y = y + x; | 1. 11 34 59 |
| 1. y = y + 2;   if (y > 4) {  y = y – 1;  } | 1. 00 11 21 32 42 |
| 1. x = x + 1;   y = y + x; | 1. 02 14 36 48 |
| 1. if ( y < 5 ) {   x = x + 1;  if (y < 3) {  x = x – 1;  }  }  y = y + 2; | 1. 00 11 23 36 410 |

Answers:

1. III
2. V
3. I
4. II
5. IV