Ransom Miller, IV

CS 104

1st search: violet

|  |  |  |  |
| --- | --- | --- | --- |
| **First** | **Last** | **Middle** | **Comparison** |
| 0 | 10 | 5 | Violet < Indigo |
| 2 | 8 | 5 | Violet < Indigo |
| 0 | 7 | 4 | Violet < green |
| 3 | 10 | 6 | Violet < lavender |
| 8 | 10 | 9 | Violet = Violet |

2nd search: green

|  |  |  |  |
| --- | --- | --- | --- |
| **First** | **Last** | **Middle** | **Comparison** |
| 0 | 10 | 5 | Green < Indigo |
| 3 | 9 | 6 | Green < Lavender |
| 0 | 4 | 2 | Green < chartreuse |
| 6 | 8 | 7 | Green < Magenta |
| 1 | 7 | 4 | Green = Green |

3rd search: yellow

|  |  |  |  |
| --- | --- | --- | --- |
| **First** | **Last** | **Middle** | **Comparison** |
| 0 | 10 | 5 | Yellow < Indigo |
| 1 | 7 | 4 | Yellow < Green |
| 4 | 8 | 6 | Yellow < Lavender |
| 2 | 4 | 3 | Yellow < dark brown |
| 10 | 10 | 10 | Yellow = Yellow |

**Color array**:

|  |  |
| --- | --- |
| aqua | [0] |
| brown | [1] |
| chartreuse | [2] |
| dark brown | [3] |
| green | [4] |
| indigo | [5] |
| lavender | [6] |
| magenta | [7] |
| red | [8] |
| violet | [9] |
| yellow | [10] |

Above: Binary Search Algorithm