* Trying to find a book called “The Mysterious Island” in a library with 26 aisles in it with each aisle has a letter sign above it
* First Approach : Go the aisles one by one 🡪O(n)
  + Time = 20 🡪 from A to T
* Second Approach : Go to every 5 aisles 🡪O(√n)
  + Time = 5 🡪 from F – K – P – U – T
* Third Approach : Go to the middle aisle then see is it in this aisle, earlier, or after 🡪O(logn)
  + Time = 4 🡪 from M – S – V – T

**First Approach (Linear Search)**

1. Go to library
2. Go to the first aisle
3. Look at the letter sign above it
4. If “The Mysterious Island” is in that aisle
5. Take the book
6. Else if “The Mysterious Island” is not in that aisle (1)
7. Go to the next aisle (2)
8. Go back to line 3
9. Else
10. Quit

**Second Approach (Jump Search)**

1. Go to library
2. Go to the fourth aisle
3. Look at the letter sign above it
4. If “The Mysterious Island” is in that aisle
5. Take the book
6. Else if “The Mysterious Island” is in the aisles after (1)
7. Go to the next 5 aisles (6)
8. Else if “The Mysterious Island” is in the aisles before
9. Go to the previous aisle before this one
10. Else
11. Quit

**Third Approach (Binary Search)**

1. Go to library
2. Go to the middle aisle
3. Look at the letter sign above it
4. If “The Mysterious Island” is in that aisle
5. Take the book
6. Else if “The Mysterious Island” is in the aisles before (13)
7. Go to the middle of the earlier aisles (6)
8. Go back to line 3
9. Else if “The Mysterious Island” is in the aisles after
10. Go to the middle of the later aisles
11. Go back to line 3
12. Else
13. Quit

