Assignment 5

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Replit link: https://replit.com/join/devpivanmr-albertoruizbern

Binary Search

```
→ linear-data-struct-algorithms git:(master) × /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-18.0.2.1.jdk/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/aruiz/Library/Application\ Support/Code/User/workspaceStorage/0cc13e5f88dacb1a54bb73d0e98575ae/redhat.java/jdt_ws/linear-data-struct-algorithms_b10ed582/bin B
[20, 20, 35, 41, 48, 50, 52, 62, 69, 71, 75, 76, 84, 87, 88, 92, 97, 98, 98, 100]
Please enter a search key (-1 to quit): 75
20 20 35 41 48 50 52 62 69 71 75 76 84 87 88 92 97 98 98 100
               75 76 84 87 88 92 97 98 98 100
               75 76 84 87
75 was found in position 10
Please enter a search key (-1 to quit): 35
20 20 35 41 48 50 52 62 69 71 75 76 84 87 88 92 97 98 98 100
20 20 35 41 48 50 52 62 69
20 20 35 41
  35 41
35 was found in position 2
Please enter a search key (-1 to quit): -1
20 20 35 41 48 50 52 62 69 71 75 76 84 87 88 92 97 98 98 100
20 20 35 41 48 50 52 62 69
20 20 35 41
-1 was not found
→ linear-data-struct-algorithms git:(master) x
                                                                                                                                 Ln 43, Col 42 Spaces: 3 UTF-8 LF
```

Factorial

```
→ linear-data-struct-algorithms git:(master) /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-18.0.2.1.jdk/Cont ents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/aruiz/Library/Application Support/Code/User/workspaceStorage/0cc13e5f88dacb1a54bb73d0e98575ae/redhat.java/jdt_ws/linear-data-struct-algorithms_b10ed582/bin Fac torialCalculator
0! = 1
1! = 1
2! = 2
3! = 6
4! = 24
5! = 120
6! = 720
7! = 5040
8! = 40320
9! = 3628800
0! = 1
1! = 1
2! = 2
3! = 6
4! = 24
5! = 120
6! = 720
7! = 5040
8! = 40320
9! = 3628800
0! = 1
1! = 1
2! = 2
3! = 6
4! = 24
5! = 120
6! = 720
7! = 5040
8! = 40320
9! = 362880
10! = 3628800

→ linear-data-struct-algorithms git:(master)
```