

What are the differences between the two methods findTicketByPrice\_Linear and existsTicketByPrice\_Linear? **one finds a ticket with price given, one finds if there exists a ticket with the price given.** 

- 2. Open the Searching.java file in the Algorithms package in your library project. What is the difference between linearSearch and linearSearch2? linearSearch returns a boolean checking if the generic target exists, linearSearch 2 returns the generic that is found.
- 3. Why are these two methods static? because they handle generic types, they can be used with whatever datatype you specify when you invoke it, meaning it's reasonable to allow the methods to be called without class instantiation.
- 4. What kind of objects can be in the arrays that these methods have as the first parameter? Anything. More specifically any class thats a subclass of the object class.

```
Linear Search. Didn't find concert with $15 tickets
Linear Search. Found concert with $75 tickets:
        ConcertTicket{
                         price=75
                                                                     name=Trans-Siberian Orchestra}
Linear Search. Found concert with $20 tickets:
        ConcertTicket{ price=20
                                                   seat= 49
                                                                    name=Phish}
                                           row=K
Linear Search. Didn't find concert with $68 tickets
Linear Search. Concert with $40 tickets exists.
Linear Search. Didn't find concert with $13 tickets
Linear Search. Didn't find concert with $47 tickets
Linear Search. Didn't find concert with $34 tickets
Unsorted:
        ConcertTicket{
                                                                     name=Jason Aldean}
                          price=40
        ConcertTicket{
                                           row=L
                                                    seat= 38
                                                                     name=Panic at the Disco}
                                                                     name=Phish}
                          price=20
                                                    seat= 49
        ConcertTicket{
                                           row=K
        ConcertTicket{
                          price=35
                                           row=0
                                                    seat= 50
                                                                     name=Carrie Underwood}
                          price=18
        ConcertTicket{
                                           row=B
                                                    seat= 33
                                                                     name=Bonnie Raitt}
        ConcertTicket{
                          price=50
                                           row=K
                                                    seat= 31
                                                                    name=Needtobreathe}
                                                    seat= 18
        ConcertTicket{
                          price=80
                                           row=R
                                                                    name=Dolly Parton}
                          price=75
                                                    seat= 23
                                                                     name=Trans-Siberian Orchestra}
        ConcertTicket{
                                           row=H
        ConcertTicket{
                         price=45
                                           row=H
                                                    seat= 16
                                                                    name=Twney One Pilots}
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Sorted by name:
        ConcertTicket{
                                                                    name=Bonnie Raitt}
                          price=18
                                           row=V
                                                   seat= 48
        ConcertTicket{
                          price=35
                                           row=F
                                                   seat= 37
                                                                    name=Carrie Underwood}
                                                   seat= 25
                                                                    name=Dolly Parton}
        ConcertTicket{
                         price=80
                                           row=K
        ConcertTicket{
                         price=18
                                           row=Z
                                                   seat= 53
                                                                    name=Jason Aldean}
        ConcertTicket{
                         price=50
                                           row=J
                                                   seat= 17
                                                                    name=Needtobreathe}
                                                   seat= 56
                                                                    name=Panic at the Disco}
        ConcertTicket{
                          price=40
                                           row=F
        ConcertTicket{
                                                   seat= 48
                                                                    name=Phish}
                          price=20
                                           row=L
        ConcertTicket{
                          price=75
                                           row=W
                                                   seat= 10
                                                                    name=Trans-Siberian Orchestra}
                                                   seat= 13
                                                                    name=Twney One Pilots}
        ConcertTicket{
                         price=45
                                           row=X
Sorted by row:
       ConcertTicket{ price=20
                                      row=F
                                             seat= 49
                                                            name=Phish}
       ConcertTicket{
                                             seat= 52
                                                            name=Carrie Underwood}
                       price=35
                                      row=J
       ConcertTicket{
                       price=18
                                      row=L
                                             seat= 34
                                                            name=Jason Aldean}
       ConcertTicket{
                       price=50
                                      row=N
                                             seat= 19
                                                            name=Needtobreathe}
                                             seat= 24
       ConcertTicket{
                       price=80
                                      row=Q
                                                            name=Dolly Parton}
                       price=18
       ConcertTicket{
                                      row=T
                                             seat= 44
                                                            name=Bonnie Raitt}
       ConcertTicket{
                                             seat= 32
                                                            name=Panic at the Disco}
                       price=40
                                      row=T
       ConcertTicket{
                       price=75
                                      row=T
                                             seat= 56
                                                            name=Trans-Siberian Orchestra}
                                      row=T
                                             seat= 40
                                                            name=Twney One Pilots}
       ConcertTicket{    price=45
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                                          . . . .
                                                   JUG -
                                                                   Sorted by price:
        ConcertTicket{
                         price=18
                                          row=V
                                                   seat= 54
                                                                   name=Jason Aldean}
        ConcertTicket{
                         price=18
                                          row=B
                                                   seat= 15
                                                                   name=Bonnie Raitt}
                          price=20
                                                                   name=Phish}
        ConcertTicket{
                                          row=H
                                                   seat= 8
        ConcertTicket{
                         price=35
                                          row=Z
                                                   seat= 46
                                                                   name=Carrie Underwood}
                                                   seat= 40
                                                                   name=Panic at the Disco}
        ConcertTicket{
                         price=40
                                          row=J
        ConcertTicket{
                                                   seat= 2
                                                                   name=Twney One Pilots}
                         price=45
                                          row=F
                                                                   name=Needtobreathe}
        ConcertTicket{
                          price=50
                                          row=A
                                                   seat= 54
        ConcertTicket{
                          price=75
                                          row=S
                                                   seat= 39
                                                                   name=Trans-Siberian Orchestra}
```

row=Y

seat= 4

name=Dolly Parton}

ConcertTicket{

price=80