çıktılar 4 parça, yıldızlarla ayrılmış biçimde her bölümde bir fonksiyon denenmiştir.

ilki data.csv dosyasının orijinal hali

ikincisi set_items fonksiyonunun "age" key'ine 10 set edilmesi ve sort edilmesi üçüncüsü add_item fonksiyonunun "age" key'ine 1,2,3 eklenmesi ve sort edilmesi dördüncüsü delete_item fonksiyonunun "age" key'inin silinmesi ve sort edilmesi şeklindedir.

youtube link: https://www.youtube.com/watch?v=Rl01dnCaTS4

```
vboxuser@Ubuntu22:~/Desktop$ ./a.out
            Value: 25
Key: age
            Value: 12
Key: age
            Value: 556
Key: age
Key: age
            Value: 1
            Value: 192561
Key: age
Key: weight
               Value: 12.560000
Key: weight
               Value: 664.200000
Key: weight
               Value: 5.500000
Key: blood type
                   Value:
Key: blood type
                   Value:
Key: blood type
                   Value:
    height
               Value: 10.500000
Key:
Key: height
               Value: 20.250000
Key: height
               Value: 30.750000
Key: height
               Value: 40.200001
Key: score
              Value: 30
              Value: 45
Key: score
              Value: 120
Key: score
     price
              Value: 9.800000
Key:
Key: price
              Value: 7.600000
              Value: 15.300000
Key: value
     value
              Value: 25.799999
Key:
Key: value
              Value: 35.599998
Key: value
              Value: 48.900002
Key: value
              Value: 56.200001
Key: quantity
                 Value: 5
Key: quantity
                 Value: 10
Key: quantity
                 Value: 15
Key: quantity
                 Value: 20
               Value: 18.900000
Key: amount
               Value: 24.700000
Key: amount
Key: amount
               Value: 33.600000
    letter
               Value:
Key:
    letter
               Value:
Key:
               Value:
     letter
Key:
    letter
               Value:
Key:
                    Value: 22.500000
Key: temperature
Key: temperature
                    Value: 30.799999
Key: temperature
                    Value: 38.099998
                    Value: 42.599998
Key: temperature
     count
Key:
              Value: 8
              Value: 16
Key:
     count
Key: count
              Value: 32
```

```
Key:
              Value: 8
     count
              Value: 16
Key:
     count
              Value: 32
Key: count
                 Value: 55.400000
     distance
Key:
     distance
Key:
                 Value: 67.900000
Key: speed
              Value: 40.500000
Key: speed
              Value: 55.200001
Key: speed
              Value: 60.900002
              Value: 75.300003
Key:
     speed
Key: size
             Value: 100
             Value: 200
    size
Key:
             Value: 300
     size
Key:
Key: size
             Value: 400
     balance
                Value: 500.250000
Key:
     balance
                Value: 1000.500000
Key:
***********************
            Value: 10
Key:
     age
               Value: 18.900000
Key:
     amount
               Value: 24.700000
Key: amount
Key: amount
               Value: 33.600000
Key:
     balance
                Value: 500.250000
Key: balance
                Value: 1000.500000
    blood type
                   Value:
Key:
    blood_type
                   Value:
Key:
    blood_type
Key:
                   Value:
Key: count
              Value: 8
              Value: 16
    count
Key:
     count
              Value: 32
Key:
Key:
     distance
                 Value: 55.400000
     distance
                 Value: 67.900000
Key:
     height
               Value: 10.500000
Key:
Key: height
               Value: 20.250000
    height
               Value: 30.750000
Key:
     height
Key:
               Value: 40.200001
     letter
               Value:
Key:
     letter
               Value:
Key:
Key:
     letter
               Value:
               Value:
Key:
     letter
              Value: 9.800000
     price
Key:
     price
              Value: 7.600000
Key:
     quantity
                 Value: 5
Key:
Key: quantity
                 Value: 10
Key: quantity
                 Value: 15
```

Value: 42.599998

Key: temperature

```
Value: 7.600000
Key: price
     quantity
                 Value: 5
Key:
     quantity
                 Value: 10
Key:
Key: quantity
                 Value: 15
     quantity
                 Value: 20
Key:
              Value: 30
Key: score
              Value: 45
Key: score
Key: score
              Value: 120
             Value: 100
Key:
     size
Key: size
             Value: 200
             Value: 300
Key:
     size
Key:
     size
             Value: 400
              Value: 40.500000
Key:
     speed
Key: speed
              Value: 55.200001
              Value: 60.900002
     speed
Key:
              Value: 75.300003
Key:
     speed
                    Value: 22.500000
    temperature
Key:
                    Value: 30.799999
    temperature
Key:
    temperature
                    Value: 38.099998
Key:
Key: temperature
                    Value: 42.599998
     value
              Value: 15.300000
Key:
              Value: 25.799999
     value
Key:
     value
              Value: 35.599998
Key:
     value
              Value: 48.900002
Key:
     value
Key:
              Value: 56.200001
Key: weight
              Value: 12.560000
Key: weight
               Value: 664.200000
Key: weight
               Value: 5.500000
********************
Key: age
            Value: 1
            Value: 2
Key: age
            Value: 3
     age
Key:
               Value: 18.900000
Key: amount
               Value: 24.700000
Key:
     amount
               Value: 33.600000
Key:
     amount
Key:
     balance
                Value: 500.250000
     balance
                Value: 1000.500000
Key:
     blood type
Key:
                   Value:
Key: blood type
                   Value:
     blood_type
                   Value:
Key:
Key:
              Value: 8
     count
              Value: 16
Key:
     count
              Value: 32
Key:
     count
Key: distance
                 Value: 55.400000
```

Key: distance Value: 55.400000 distance Value: 67.900000 Key: height Value: 10.500000 Key: height Value: 20.250000 Key: height Value: 30.750000 Key: Key: height Value: 40.200001 letter Key: Value: Value: letter Key: Value: letter Key: letter Key: Value: Value: 9.800000 Key: price price Value: 7.600000 Key: Value: 5 quantity Key: quantity Value: 10 Key: Key: quantity Value: 15 Key: quantity Value: 20 Value: 30 Key: score Key: score Value: 45 Value: 120 score Key: size Value: 100 Key: Key: size Value: 200 size Value: 300 Key: size Value: 400 Key: Value: 40.500000 speed Key: Value: 55.200001 speed Key: speed Value: 60.900002 Key: Value: 75.300003 Key: speed Value: 22.500000 temperature Key: Value: 30.799999 temperature Key: Value: 38.099998 Key: temperature temperature Value: 42.599998 Key: Value: 15.300000 value Key: value Value: 25.799999 Key: value Value: 35.599998 Key: Value: 48.900002 value Key: value Value: 56.200001 Key: weight Value: 12.560000 Key: weight Value: 664.200000 Key: Key: weight Value: 5.500000 ************************ Key: amount Value: 18.900000 amount Value: 24.700000 Key: Key: amount Value: 33.600000 Key: balance Value: 500.250000

```
Key: amount
               Value: 33.600000
                Value: 500.250000
     balance
Key:
                Value: 1000.500000
Key:
     balance
Key: blood_type
                   Value:
Key: blood_type
                   Value:
     blood_type
                   Value:
Key:
              Value: 8
Key: count
Key: count
              Value: 16
              Value: 32
     count
Key:
     distance
                 Value: 55.400000
Key:
     distance
                 Value: 67.900000
Key:
Key: height
               Value: 10.500000
     height
               Value: 20.250000
Key:
    height
               Value: 30.750000
Key:
               Value: 40.200001
    height
Key:
               Value:
     letter
Key:
               Value:
     letter
Key:
               Value:
     letter
Key:
               Value:
Key:
     letter
Key: price
              Value: 9.800000
Key: price
              Value: 7.600000
Key: quantity
                 Value: 5
                 Value: 10
Key: quantity
Key: quantity
                 Value: 15
Key: quantity
                 Value: 20
Key: score
              Value: 30
              Value: 45
Key: score
Key: score
              Value: 120
Key: size
             Value: 100
Key: size
             Value: 200
Key: size
             Value: 300
Key: size
             Value: 400
              Value: 40.500000
Key: speed
     speed
              Value: 55.200001
Key:
              Value: 60.900002
Key:
    speed
Key: speed
              Value: 75.300003
                    Value: 22.500000
    temperature
Key:
    temperature
                    Value: 30.799999
Key:
Key: temperature
                    Value: 38.099998
                    Value: 42.599998
     temperature
Key:
     value
              Value: 15.300000
Key:
Key: value
              Value: 25.799999
Kev value
              Value: 35 500008
```

Value: 18.900000 Value: 24.700000

Key: amount

Key:

amount

Key: blood_type Value: Value: 8 count Key: Value: 16 count Key: Value: 32 count Key: distance Value: 55.400000 Key: Value: 67.900000 distance Key: Value: 10.500000 height Key: Key: height Value: 20.250000 Key: height Value: 30.750000 Value: 40.200001 Key: height letter Value: Key: Value: letter Key: letter Key: Value: Value: letter Key: Value: 9.800000 price Key: price Value: 7.600000 Key: quantity Key: Value: 5 Value: 10 Key: quantity Key: quantity Value: 15 Value: 20 Key: quantity Key: score Value: 30 Value: 45 Key: score Value: 120 score Key: Key: size Value: 100 Key: size Value: 200 size Value: 300 Key: Key: size Value: 400 speed Value: 40.500000 Key: Value: 55.200001 Key: speed Value: 60.900002 speed Key: Value: 75.300003 Key: speed Value: 22.500000 temperature Key: temperature Value: 30.799999 Key: Key: temperature Value: 38.099998 temperature Value: 42.599998 Key: Value: 15.300000 value Key: value Value: 25.799999 Key: Value: 35.599998 value Key: value Value: 48.900002 Key: Key: value Value: 56.200001 Key: weight Value: 12.560000 Key: weight Value: 664.200000 Key: weight Value: 5.500000 vboxuser@Ubuntu22:~/Desktop\$