

Assignment 7

Add to the Contest program started in class
Save as Contest.java

Process the KOHC.LOG file as follows:

Each QSO (contact) is worth 2 points.

Multipliers = 83 (or calculate multipliers as shown below for additional credit)

Total score = QSO points * multipliers

Create a report.txt file as follows:

KOHC.LOG Report

A contacts

B contacts

M contacts

U contacts

Q contacts

S contacts

80m contacts (3500)

40m contacts (7000)

20m contacts (14000)

15m contacts (21000)

10m contacts (28000)

Total contacts

Multipliers

Total score

Create a schools.txt file as follows:

KOHC.LOG Schools Worked

QSO line for each school goes here

QSO line for each school goes here

Total schools

Create an error.txt file as follows:

KOHC.LOG Error Report

QSO line for each error goes here

QSO line for each error goes here

QSO line for each error goes here

Total errors

Create a TEST.LOG file to test your program. Be sure to test for each possible type of error.

After testing your program, run it with KOHC.LOG.

Since you were given the basic program format, an algorithm is optional.

Comment your program carefully.

Put Contest.java in your H:\CP1\Java\bookClasses folder by the due date.

There is nothing to hand in. This assignment will be graded online.

Contest.java additional information

Precedence

A low power
B high power
Q very low power
M Multi-op
U Unlimited
S School

Band Frequency

10m 28000 khz
15m 21000 khz
20m 14000 khz
40m 7000 khz
80m 3500 khz

QSO format

(A: alphabetic field, 9: numeric field) 9999 A 99 AAA
QSO: 14305 PH 2019-11-16 2100 K0HC 0001 S 97 KS K17Y 1 B 59 ORG
band mode date time call # Prec Check Section Call # Prec Check Section

Optional multiplier calculation algorithm

```
// Constants and Variables needed
MAX_SECTIONS = 83
String section
String sections[ ] (to hold all possible sections)
boolean found
int countSections = 0

get the section

// see if section is already in sections array
found = false
for i=0 to countSections - 1
    if section == sections[ i ]
        found = true
end for

// if section isn't found, add it to the sections array
if not found
    sections[ countSections ] = section
    increment sectionCount
    print "Adding section" + section
end if
```

Note: Multiplier count will be the value of countSections or the length of the sections array.