



Project 2: Sorting Cats



Project 2: Sorting Cats

- Write a C++ console application to read a text file containing information about cats and output the information to the screen.
- Let the output be in alphabetical order according to the cats' names.



Specifications

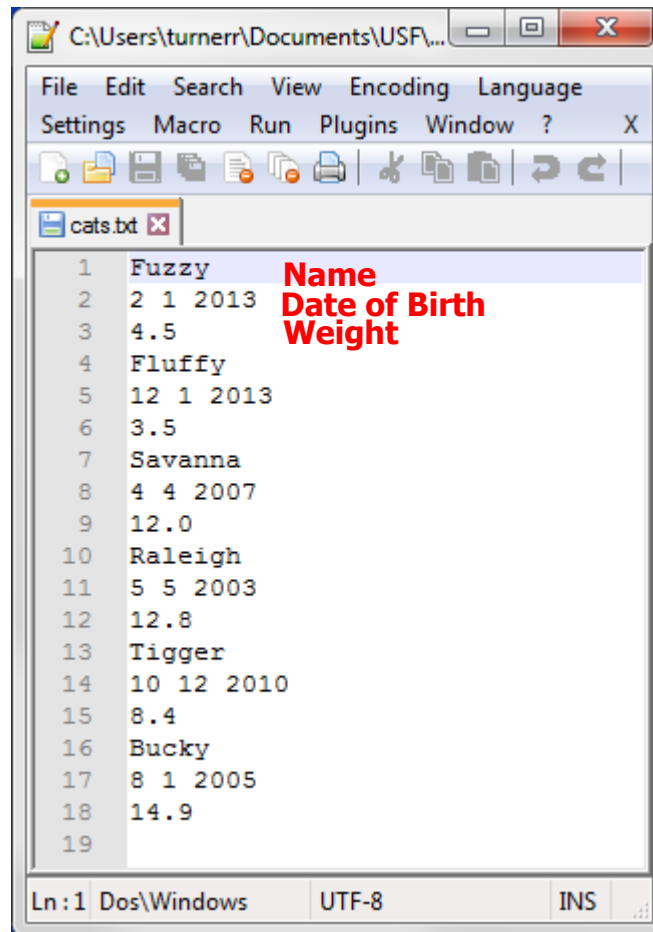
- Create and sort an array of pointers to Cat objects.
 - Each Cat object created with information read from the text file.
- You may reuse code from the class web site.
 - Will need modifications.
- The input file will contain no more than 20 cats.



Specifications for Class Cat

- Use C++ string class for name.
- Add << operator to class Cat and use it (rather than the Display method) to output information about each cat.
- Add > operator to class Cat and use it to compare cats in the sort function.
 - Base comparison on cats' names.

Sample Input File

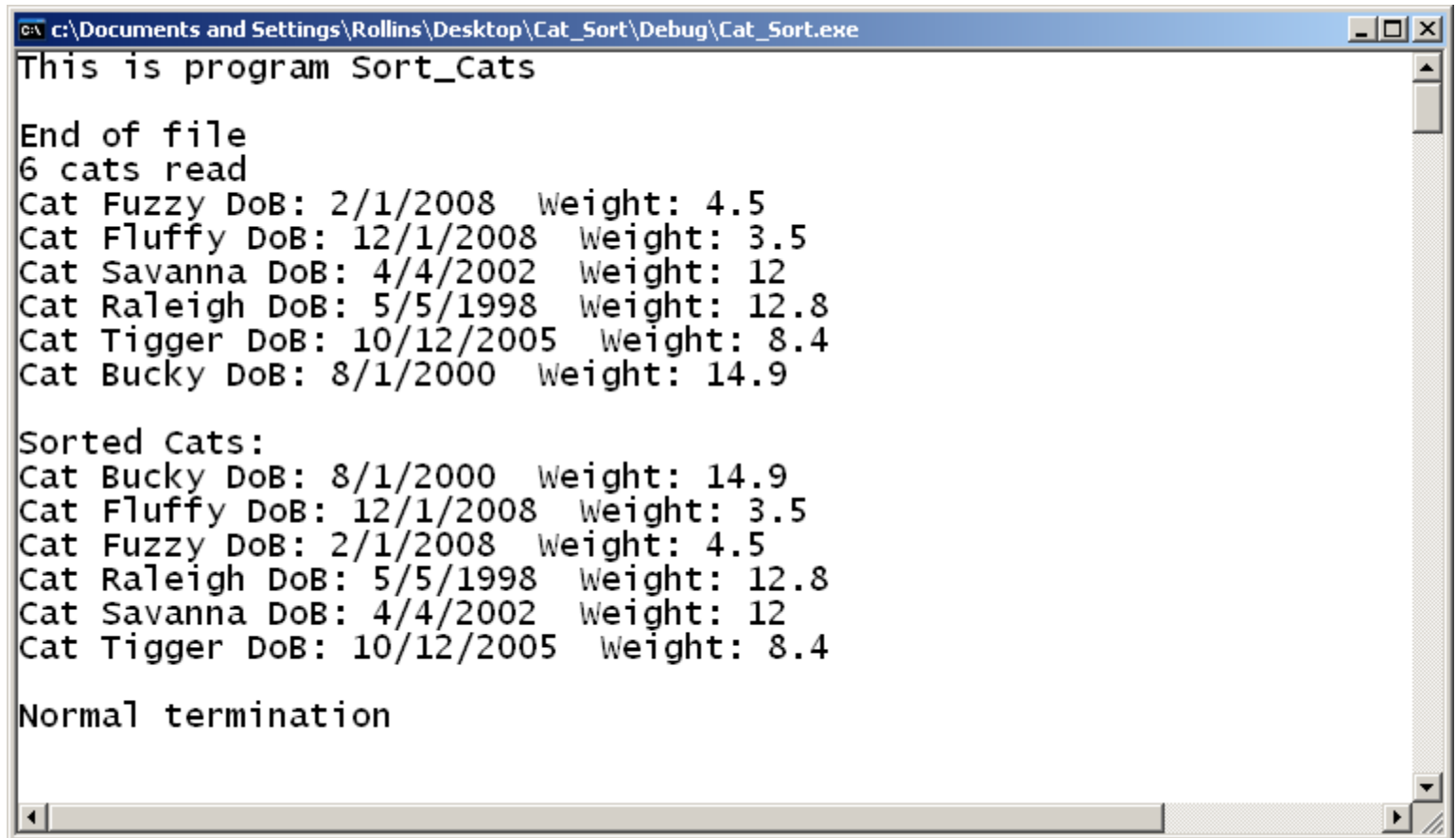


```
1 Fuzzy
2 2 1 2013
3 4.5
4 Fluffy
5 12 1 2013
6 3.5
7 Savanna
8 4 4 2007
9 12.0
10 Raleigh
11 5 5 2003
12 12.8
13 Tigger
14 10 12 2010
15 8.4
16 Bucky
17 8 1 2005
18 14.9
19
```

Ln: 1 Dos\Windows UTF-8 INS

[http://www.cse.usf.edu/~turnerr/Object_Oriented_Design/Downloads/2016_01_29/Project_2_Sorting_Cats/](http://www.cse.usf.edu/~turnerr/Object_Oriented_Design/Downloads/2016_01_29/Project_2_Sorting_Cats/File_cats.txt) File cats.txt

Sample Output



```
c:\Documents and Settings\Rollins\Desktop\Cat_Sort\Debug\Cat_Sort.exe
This is program Sort_Cats

End of file
6 cats read
Cat Fuzzy DoB: 2/1/2008  Weight: 4.5
Cat Fluffy DoB: 12/1/2008  Weight: 3.5
Cat Savanna DoB: 4/4/2002  Weight: 12
Cat Raleigh DoB: 5/5/1998  Weight: 12.8
Cat Tigger DoB: 10/12/2005  Weight: 8.4
Cat Bucky DoB: 8/1/2000  Weight: 14.9

Sorted Cats:
Cat Bucky DoB: 8/1/2000  Weight: 14.9
Cat Fluffy DoB: 12/1/2008  Weight: 3.5
Cat Fuzzy DoB: 2/1/2008  Weight: 4.5
Cat Raleigh DoB: 5/5/1998  Weight: 12.8
Cat Savanna DoB: 4/4/2002  Weight: 12
Cat Tigger DoB: 10/12/2005  Weight: 8.4

Normal termination
```



Development Environment

- You may develop your program on any system you like.
- But you should test the finished program on Circe.
- The same source file should compile and run on *either Windows or Linux*.



Ground Rules

- You may work with one other person.
 - OK to work alone if you prefer.
- If you do work as a pair
 - Work together!
 - Both members are expected to contribute.
 - Submit a single program.
 - Both members should understand work in detail.
- **Do not share your code with other students.**
 - Before or after submitting the project.
 - It is OK to *discuss* the project.
- **Do not copy any other student's work.**
 - Don't *look at* anyone else's code
 - Don't let anyone look at your code.



Ground Rules

Except for code posted on the class web site

- Do not copy code from the Internet
 - or any other source.
- Write your own code.



Submission

- Project is due by 11:59 PM, Thursday Feb. 4.
- Deliverables:
 - Source code only.
 - Three files: main.cpp (Main Program),
Cat.h, Cat.cpp
- Zip your files and submit the zip file using the Canvas Assignment for this class.
- If you work with another student, include both names in the assignment comments.
 - Other student should submit just a Canvas comment including both names.