

COP 2250 - Java 1  
Professor: Michael Robinson  
e-mail : michael.robinson@fiu.edu  
Web Page : www.cs.fiu.edu/~mrobi002/teaching

Program COP2250pgm3d, covering Multidimensional and Parallel Arrays,  
endless while loop, String class, files, Scanner

WORTH 8 POINTS

1 Worth 3 points

- Log to this link: [http://users.cis.fiu.edu/~mrobi002/downloads/HumanGenome/hs\\_ref\\_GRCh37.p10\\_GBK\\_Compressed/](http://users.cis.fiu.edu/~mrobi002/downloads/HumanGenome/hs_ref_GRCh37.p10_GBK_Compressed/)
- Select and download the last file in the directory, file is 10 megs.
- Open file and find out how many words does this file have.
- Find out how many times the word gene is in this file.
- How many record/lines/rows does this file have.

2 - Worth 2 points

- Implement division by 0, with error trapping, using if and while() commands,
  - Make sure to use "casting" e.i. float result = (float)int/int;
- How: Using a while loop, read 2 numbers from the user.  
Using the if statement, test that the second number is not zero, if it is inform the user of the error, and ask for a correct second number.  
if the second number is NOT a zero, do the division, display all numbers and the computation using labels, the result MUST have 2 decimal places,  
e.g. "The first number 10 divided by the second number 5 is 2.00"  
To exit the while loop the user must enter the value 999 for the first or the second number.

3 - Worth 2 points

- Create a two dimensional array of 10 rows by 10 columns
- Load each index with the multiplication of its x and y location
- Add all the values in row 2 from columns 3, 5, and 7, and print the total
- Add all the values in row 8 from columns 1, 3, and 9, and print the total

4 - Worth 1 points

Having the following TWO, ONE dimension arrays:

```
one[0] = "This Java";      two[0] = "class";  
one[1] = "at ";           two[1] = "FIU";  
one[2] = "is ";           two[2] = "challenging && enjoyable";
```

print the results in a parallel array format made with these two one dim arrays  
displaying the data BACKWARDS!!