Feedback — Module 1 Exam

Thank you. Your submission for this exam was received.

You submitted this exam on **Thu 10 Sep 2015 9:40 PM PDT**. You got a score of **10.00** out of **10.00**.

For all projects, you may use your own Unix-based system and, where applicable, ensure that you are running the version of the software specified in the assignments. Alternatively, you may use the VMBox virtual machine environment provided with the course materials. Instructions on how to download and use the environment can be found on the course web site.

For the following questions, refer to the class workflow and use the data in the Online materials ('gencommand_proj1_data.tar.gz') to answer the questions. Assume you sequenced and assembled the genome of Malus domestica (apple), and performed gene annotation. You then collected samples and ran RNA-seq experiments to determine sets of genes that are expressed in the various tissues. This information was stored, respectively, in the following files: "apple.genome", "apple.genes", "apple.condition{A,B,C}".

NOTE: The apple genome and the apple gene annotations for this project were extracted from the Rosaceae Genome Database (RGD). Actual data have then been modified, and hence may not directly reflect the information in the original RGD records.

Answer each question separately. Where multiple values are required, separate them by ',' only, with no spaces. Do not use ',' within numbers.

[Click here to download the Project 1 Data Files](https://class.coursera.org/gencommand-004/quiz/feedback?submission_id=591&sig_reload=1)

Question 1

How many chromosomes are there in the genome?

You entered:

3

Your Answer		Score	Explanation
3	✔	1.00	
Total		1.00 / 1.00	

Question 2

How many genes and transcript variants?

You entered:

5453,5456

Your Answer		Score	Explanation
5453	✔	0.50	
5456	✔	0.50	
Total		1.00 / 1.00	

Question 3

How many genes have a single splice variant?

You entered:

5450

Your Answer		Score	Explanation
5450	✔	1.00	
Total		1.00 / 1.00	

Question 4

How may genes have 2 or more splice variants?

You entered:

```
3
```

Your Answer		Score	Explanation
3	✔	1.00	
Total		1.00 / 1.00	

Question 5

How many genes are there on the '+' and '-' strands, respectively?

You entered:

```
2662,2791
```

Your Answer		Score	Explanation
2662	✔	0.50	
2791	✔	0.50	
Total		1.00 / 1.00	

Question 6

How many genes are there on each chromosome? List them in the order in which they are listed in the genome, i.e. genes on chr1, chr2, etc.

You entered:

1624,2058,1771

Your Answer		Score	Explanation
1624	✔	0.33	
2058	✔	0.33	
1771	✔	0.33	
Total		1.00 / 1.00	

Question 7

How many transcripts are there on each chromosome? Follow instructions above.

You entered:

1625,2059,1772

Your Answer		Score	Explanation
1625	✔	0.33	
2059	✔	0.33	
1772	✔	0.33	
Total		1.00 / 1.00	

Question 8

How many genes are in common between condition A and condition B?

You entered:

2410

Your Answer		Score	Explanation
2410	✔	1.00	
Total		1.00 / 1.00	

Question 9

How many genes are specific to condition A? How many genes are specific to condition B?

You entered:

1205,1243

Your Answer		Score	Explanation
1205	✔	0.50	
1243	✔	0.50	
Total		1.00 / 1.00	

Question 10

How many genes are in common to all three conditions?

You entered:

1608

Your Answer		Score	Explanation
1608	✔	1.00	
Total		1.00 / 1.00	