

# Unit 13 - Week 11

## Course outline

How does an NPTEL online course work?

### Prerequisite Assignment

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Demo: Autodock

Awk programming - I

Awk programming - II

Development of algorithms - I

Development of algorithms - II

Quiz : Assignment 11

Bio-Informatics:Algorithms and Applications : Week 11 Feedback Form

Week 12

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## Assignment 11

The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.

**Due on 2020-04-15, 23:59 IST.**

1) The name, Awk came from

1 point

- Name of a person
- Name of a city
- Named by the inventor
- Family names of its authors

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Family names of its authors

2) The command to print columns 6 and 4 from file data1 to result1

1 point

- awk '{print \$6, \$4}' data 1 result1
- awk '{print \$6, \$4}' data 1 > result1
- awk '{print \$5, \$3}' data 1 > result1
- Awk '{print \$5, \$3}' data 1 > result1

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
awk '{print \$6, \$4}' data 1 > result1

3) In printf, which letter is used to format strings

1 point

- f
- s
- d
- a

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
s

4) In a PDB file, to get the CA coordinates

1 point

- awk '\$1~/ATOM/ && \$3~/CA/ {print}'
- awk '\$1~/ATOM/ && \$7~/CA/ {print}'
- awk '\$1~/ATOM/ && \$9~/CA/ {print}'
- awk '\$1~/ATOM/ && \$2~/CA/ {print}'

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
awk '\$1~/ATOM/ && \$3~/CA/ {print}'

5) Which of the following is a real value prediction in bioinformatics?

1 point

- Prediction of slow and fast folding proteins
- Prediction of folding rates of proteins
- Prediction of high and low affinity protein-protein complexes
- Prediction of stabilizing and destabilizing mutants

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Prediction of folding rates of proteins

6) For classification problems, which of the following is the best measure for evaluating the performance?

1 point

- Accuracy
- Pearson's correlation
- Sensitivity and specificity
- All the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Sensitivity and specificity

7) For the following assignment (B: positive), what is the sensitivity?

1 point

Experimental: NNBBBBNNBNNNBBN  
Predicted : NNBBBBNNNBBBBNN

- 68.8%
- 66.6%
- 71.4%
- 31.2%

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
71.4%

8) AUC for a perfect ROC curve is

1 point

- 0.0
- 0.5
- 0.75
- 1.0

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
1.0

9) ROC is a tradeoff between

1 point

- Sensitivity and 1-specificity
- Sensitivity and specificity
- Sensitivity and accuracy
- Accuracy and 1-sensitivity

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Sensitivity and 1-specificity

10) Which of the following equation is correct if the correlation between two sets of data A and B is 1?

1 point

- A = B + 0.5
- A = -B + 1
- A = 1/B
- A = 1/B<sup>2</sup>

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
A = -B + 1