KOÇ ÜNİVERSİTESİ

INTRODUCTION TO COMPUTATIONAL SCIENCE
CMSE 501

Q1: Which of the function from Pandas reads the dataset from a large text file?

- read_csv
  This is a correct answer
- read_excel
  This is a wrong answer
- read_json
  This is a wrong answer
- read_txt
  This is a wrong answer

Q2: Which Python module brings support for web requests?

- response
  This is a wrong answer
- json
  This is a wrong answer
- blaze
  This is a wrong answer
- requests
  This is a correct answer

Q3: Which of the following is NOT a function used in combining data sets with pandas?

- concat
  This is a wrong answer
- merge
  This is a wrong answer
- join
  This is a wrong answer
- combine
  This is a correct answer

Q4: Which of the following Python libraries provides advanced random number capabilities?

- Numpy
  This is a correct answer
- Scipy

This is a wrong answer
- SymPy
  This is a wrong answer
- Pandas
  This is a wrong answer

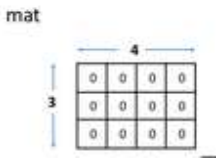
Q5:plt.barh() in matplotlib does what?

- plots a bar graph with titles from column variables
  This is a wrong answer
- plots a combo bar graph and line graph
  This is a wrong answer
- plots a horizontal bar graph
  This is a correct answer
- hides a bar graph
  This is a wrong answer

Q1: What is the most important advantage of using NumPy ?

- Speed
  This is a correct answer
- Portability
  This is a wrong answer
- Readable code
  This is a correct answer
- Easy to learn
  This is a wrong answer

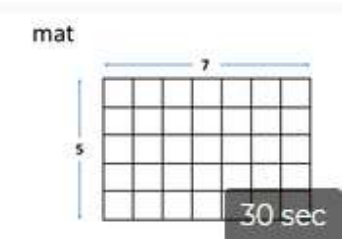
Q2: Create an array of zeros having 3 rows, 4 columns



- mat=np.zeros(3,4)
  This is a wrong answer
- mat=np.zeros(4,3)
  This is a wrong answer
- mat=np.zeros((3,4))

This is a correct answer

- mat=np.zeros((4,3))
  This is a wrong answer



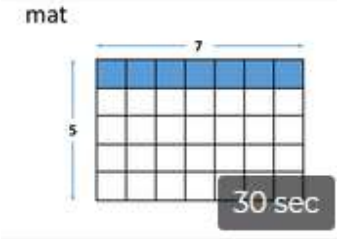
Q3: The command for retrieving the number of **columns** in the array ***mat*** *is...*

- mat.cols()
  This is a wrong answer
- mat.size[0]
  This is a wrong answer
- mat.shape[1]
  This is a correct answer
- mat.shape[0]
  This is a wrong answer

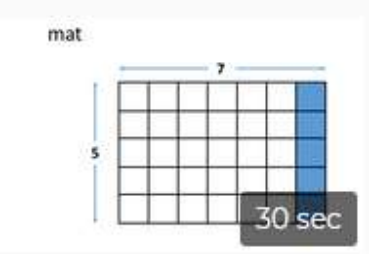
Q4: The command for retrieving the number of **rows** in the array ***mat*** *is...*

- mat.rows()
  This is a wrong answer
- mat[1].shape
  This is a wrong answer
- mat.shape[1]
  This is a wrong answer
- len(mat)
  This is a correct answer

Q5: Extract the **first row** of array ***mat***

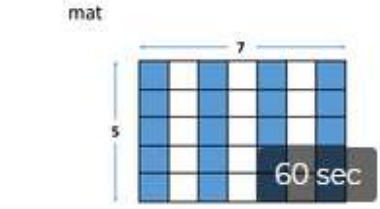


- mat[0,:]
  This is a correct answer
- mat[:,0]
  This is a wrong answer
- mat[0]
  This is a correct answer
- mat[1]
  This is a wrong answer



Q6: Extract the **last column** of array ***mat***

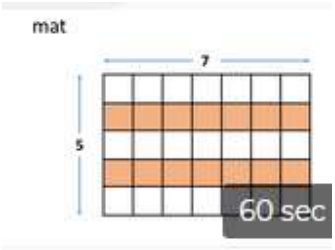
- mat[-1]
  This is a wrong answer
- mat[:,-1]
  This is a correct answer
- mat[-1,:]
  This is a wrong answer
- mat[1]
  This is a wrong answer



Q7: Extract the **even columns** of array ***mat***

- mat[:,::2]
  This is a correct answer
- mat[:,1::2]
  This is a wrong answer
- mat[1::2,:]
  This is a wrong answer

- mat[0:2:6,:]
  This is a wrong answer



Q8: **Sum** of **all orange cells** in array ***mat***

- mat.sum([:,::2])
  This is a wrong answer
- mat[1::2,:].sum()
  This is a correct answer
- np.sum(mat)[1::2,:]
  This is a wrong answer
- np.mat[::2,:]
  This is a wrong answer

Q9: Return the **column means** of array ***mat*** *(result is a row vector)*

- mat.mean()
  This is a wrong answer
- mat.mean(axis=1)
  This is a wrong answer
- mat.mean(axis=0)
  This is a correct answer
- np.mean(mat,axis=1)
  This is a wrong answer

Q10: Return the number of values greater than 5 in each row of array ***mat***

- mat(x>5).sum(axis=0)
  This is a wrong answer
- (mat>5).sum(axis=0)
  This is a wrong answer
- mat(x>5).sum(axis=1)
  This is a wrong answer
- (mat>5).sum(axis=1)
  This is a correct answer