What are the four basic steps needed to read and process a file?

A: 1. – open, 2. – read, 3. – do some processing, 4. - close

A text file has the following data:

Washington
Adams
Jefferson

After the above file is opened as "fi", what code will display names in single space format?

A:
```
x = fi.read()
print(x)
```

What code is needed to open a file "infile.txt" for read access and assign it to the file access variable "fi"?

A: fi = open("infile.txt", "r")

After a file is opened and assigned the file access variable "fi", what will be in the variable "indata" after the following code is executed?

```
indata = fi.read()
```

A: indata will be a string containing the entire file

After the above file is opened as "fi", what code will display names in single space format if readlines() is used?

A:
```
x = fi.readlines()
for line in x:
    print(line[:-1])
```

After a text file is opened and assigned the file access variable "fi", what will be the display output after the following code is executed?

```
print (fi.read() )
```

A: the entire file will be displayed as it would appear when using Notepad or other text editor

A list of continents:

```
continents = ['Africa', 'Antarctica', 'Asia', 'Australia', 'Europe',
              'North America']
```

What code will write the names of the continents to a file called 'continents.txt' so that they will appear as lines 1 – 6 in the file when a text editor like Notepad is used to display the file?

A:
```
f = open('continents.txt', 'w')
for c in continents:
    f.write(c + '\n')
f.close()
```

A text file has the following data:

Washington
Adams
Jefferson

After the above file is opened as "fi", what will be the display output of the following code?

```
x = fi.readlines()
for line in x:
    print(line)
```

A:
Washington

Adams

Jefferson

A list of continents:

```
continents = ['Africa', 'Antarctica', 'Asia', 'Australia', 'Europe',
              'North America', 'South America']
```

How might the data be changed so that the names of the continents can be written to a file called 'continents.txt' so that they will appear as lines 1 – 7 in the file when a text editor like Notepad is used to display the file? The following code will do the writing.

```
f = open('continents.txt', 'w')
f.writelines(continents)
f.close()
```

A: continents = ['Africa\n', 'Antarctica\n', 'Asia\n', 'Australia\n',
'Europe\n', 'North America\n',
'South America\n']

```
indata = fi.readlines()
```

A: indata will be a list consisting of one string for each line in the file

A list of grocery items purchased is in this list:

items = [['eggs', 2.50], ['Vie de France baguette', 1.95],
['Pinot Noir', 11.0]]

What code is needed to print the receipt as in the previous question, but add a total cost at the bottom labelled "Total" and line it up with the printed items?

A:
```
def receipt (inlist):
    total = 0.0
    for item in inlist:
        print (' {0:20s}   ${1:8.2f}'.format(item[0], item[1]))
        total += item[1]
    print (' {0:20s}   $(1:8.2f}'.format("Total", total))
```

Given a list of U.S. presidents 'presidents' and the years they were elected:

presidents = [['Washington', 1788], ['Lincoln', 1860],
['Roosevelt', 1932], ['Obama', 2008]]

What code would convert the above list (assume more than the four shown) into a dictionary called 'prez' using the year elected as key and the name of the president as the value?

A:
```
prez = {  }
for p in presidents:
    prez[p[1]] = p[0]
```

Given a dictionary of all U.S. presidents 'prez' and the years they were elected, with the year as key and the name as the value.

Show the code needed to prompt a user for a year and display the name of the president from the dictionary. If the year is not in the dictionary display a message saying 'not found'.

A:
```
year = int(input('Enter the year: '))
if year in prez:
    print(prez[year])
else:
    print('not found')
```