Basics of Python

Fill valid code/values in place of blanks.

```
# Demo
# initialize variable 'msg' with the string 'Hello World'
msg = _____

# Solution
msg = "Hello World"
```

In [3]:

```
# initialize variables 'a' and 'b' with 5 and 6 respectively
a = 5
b = 6

# add 'a' and 'b' and assign the result into a new variable 'c'
c = 5 + 6
print(c)
```

```
11
```

In [4]:

```
# build a function to add 2 numbers
def addition(x,y):
    return(5+6)

# use the function 'addition' to add 'a' and 'b'
addition(a,b)
```

Out[4]:

```
11
```

In [5]:

```
# create a list consisting of first 5 even numbers and print the list
my_list = [2,4,6,8,10]
print(my_list)
```

```
[2, 4, 6, 8, 10]
```

In [7]:

```
# access the 3rd element of the list 'my_list'
my_list[2]
```

Out[7]:

```
6
```

In [8]:

```
# given below is a dictionary having 4 unique keys, i.e., 'name', 'age', 'gender', 'is_empl
my_dict = {'name':'Smith',
           'age':34,
           'gender': 'Male',
           'is_employed': False}

# print 'my_dict'
print(my_dict)
```

```
{'name': 'Smith', 'age': 34, 'gender': 'Male', 'is_employed': False}
```

In [10]:

```
# access value under 'name' key from 'my_dict'
my_dict['name']
```

Out[10]:

```
'Smith'
```

In [11]:

```
# update 'is_employed' key to True
my_dict.update({'is_employed': True})

# print the updated dictionary
print(my_dict)
```

```
{'name': 'Smith', 'age': 34, 'gender': 'Male', 'is_employed': True}
```

In [12]:

```
# use a for loop to print only even numbers from the first 20 numbers, i.e. 1-20
for i in range(1,21):
    if i % 2 == 0:
        print(i)
```

```
2
4
6
8
10
12
14
16
18
20
```

Please download the file "data_python.csv".

In [13]:

```
# import required libraries
import pandas as pd
import numpy as np
```

In [14]:

```
## read data_python.csv using pandas
mydata = pd.read_csv("data_python.csv")
```

In [16]:

```
## print the number of rows and number of columns of mydata
mydata.shape
```

Out[16]:

```
(614, 13)
```

In [17]:

```
## assign a variable 'target' with the 'Loan_Status' feature from mydata dataframe
target = mydata['Loan_Status']
```

In [18]:

```
## print the datatype of ApplicantIncome feature
print(mydata['ApplicantIncome'].dtypes)
```

```
int64
```

In [19]:

```
## conditional statement - print 'Yes' if the 21st element of 'Education' feature is 'Gradu
if(mydata['Education'][20] == 'Graduate'):
    print('Yes')
else:
    print('No')
```

```
No
```

In [41]:

```
## print 31st to 35th rows of mydata
mydata.iloc[30:35]
```

Out[41]:

	Loan_ID	Gender	Married	Dependents	Education	Self_Employed	ApplicantIncome	Coap
30	LP001091	Male	Yes	1	Graduate	NaN	4166	
31	LP001095	Male	No	0	Graduate	No	3167	
32	LP001097	Male	No	1	Graduate	Yes	4692	
33	LP001098	Male	Yes	0	Graduate	No	3500	
34	LP001100	Male	No	3+	Graduate	No	12500	

In [40]:

```
## print first 5 rows of 2nd and 3rd column only
mydata.iloc[:5,1:3]
```

Out[40]:

	Gender	Married
0	Male	No
1	Male	Yes
2	Male	Yes
3	Male	Yes
4	Male	No

In [ ]:

```

```