

Assignment -1

Assignment Date	19 September 2022
Student Name	Miss Madhumitha N
Student Roll Number	620119106049
Maximum Marks	2 Marks

Question-1:

1.Split This String:

S="Hi there sam!"



Ans: S.split()
print(S)

Output :

['Hi', 'there', 'sam!']

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main.py	  Run	Shell
<pre>1 que="Hi there sam!" 2 ans=que.split() 3 print(ans)</pre>		<pre>['Hi', 'there', 'sam!'] > </pre>



Question-2:

2. Use format() to print the following String:

```
print('The diameter of the {} is {}
kilometers'.format('Earth',
'12742'))
```

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main.py	  Run	Shell	Clear
<pre>1 print('The diameter of the {} is {} kilometers' .format('Earth', '12742'))</pre>		<pre>The diameter of the Earth is 12742 kilometers > </pre>	

Question-3

3. in This Dictionary grab the word "hello"

```
d={'k1':[1,2,3,{ 'tricky':['oh','man','Inception',{ 'target':[1,2,3,'hello']}]}]}
```

Ans:

Question-4





4.1.Create an array of 10 Zeros?

```
import numpy as np
a=np.zeros(10)
print(a)
```



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main.py	  	Shell	
<pre>1 import numpy as np 2 a=np.zeros(10) 3 print(a)</pre>		<pre>[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.] > </pre>	





4.2.Create an array of 10 fives?

```
import numpy as np
a=np.ones(10)*5
print(a)
```



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main.py	  	Shell	
<pre>1 import numpy as np 2 a=np.ones(10)*5 3 print(a)</pre>		<pre>[5. 5. 5. 5. 5. 5. 5. 5. 5. 5.] > </pre>	

Question-5

5.Create an Array of All the Even Integers from 20 to 35?

```
import numpy as np
array=np.arange(20,31,2)
print("array of even integers from 20 to 30")
print(array)
```



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main.py	  	Shell	
<pre>1 import numpy as np 2 array=np.arange(20,31,2) 3 print("array of even integers from 20 to 30") 4 print(array)</pre>		<pre>array of even integers from 20 to 30 [20 22 24 26 28 30] > </pre>	

Question-6

6. Create a 3X3 matrix with values ranging from 0 to 8

```
import numpy as np
m=np.arange(0,9).reshape(3,3)
print(m)
```



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main.py	Run	Shell
<pre>1 import numpy as np 2 m=np.arange(0,9).reshape(3,3) 3 print(m)</pre>		<pre>[[0 1 2] [3 4 5] [6 7 8]] ></pre>

Question-7

Concatenate a and b

```
a=np.array([1,2,3]),b=np.array([4,5])
import numpy as np
a=np.array([1,2,3])
b=np.array([4,5,6])
con=np.concatenate((a,b),axis= 0)
print(con)
```



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main.py	Run	Shell	Clear
<pre>1 import numpy as np 2 a=np.array([1,2,3]) 3 b=np.array([4,5,6]) 4 con=np.concatenate((a,b),axis= 0) 5 print(con)</pre>		<pre>[1 2 3 4 5 6] ></pre>	

Question-8

8. Create a Dataframe with 3 rows and 2 columns import pandas as pd?

```
import pandas as pd
lst=[[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]
df=pd.DataFrame(lst,columns=['Sno','Alphabets','val'])
print(df)
```

main.py	Shell
<pre> 1 import pandas as pd 2 lst=[[1, 'aaa', 22],[2, 'bbb', 25],[3, 'ccc', 24]] 3 df=pd.DataFrame(lst,columns=['Sno', 'Alphabets', 'val']) 4 print(df) </pre>	<pre> Sno Alphabets val 0 1 aaa 22 1 2 bbb 25 2 3 ccc 24 > </pre>

Question-9

9.Generate the series of Dates form 1st Jan,2023 to 10th Feb,2023?

```

import datetime
import pandas as pd
test_date = datetime.datetime.strptime("01-01-2023", "%d-%m-%Y")
K = 10
date_generated = pd.date_range(test_date, periods=K)
print(date_generated.strftime("%d-%m-%Y"))

```

main.py	Shell
<pre> 1 import datetime 2 import pandas as pd 3 test_date = datetime.datetime.strptime("01-01-2023", "%d-%m-%Y") 4 K = 10 5 date_generated = pd.date_range(test_date, periods=K) 6 print(date_generated.strftime("%d-%m-%Y")) </pre>	<pre> Sno Alphabets val 0 1 aaa 22 1 2 bbb 25 2 3 ccc 24 > </pre>

Question-10

10.Create 2D list to DataFrame

```

import pandas as pd
lst = [[1,'aaa', 22], [2,'bbb', 25], [3,'ccc', 24]]
# creating df object with columns specified
df = pd.DataFrame(lst, columns=['sno','name', 'number'])
print(df)

```

main.py	Shell
<pre> 1 2 import pandas as pd 3 lst = [[1,'aaa', 22], [2,'bbb', 25], [3,'ccc', 24]] 4 # creating df object with columns specified 5 df = pd.DataFrame(lst, columns=['sno','name', 'number']) 6 print(df) </pre>	<pre> sno name number 0 1 aaa 22 1 2 bbb 25 2 3 ccc 24 > </pre>

