```
1.s="Hi there Sam!"
x=s.split()
print(x)

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

2.import numpy as np
arr=np.zeros(10)
print("An array of 10 zeros:")
print(arr)

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

4.1.import numpy as np
arr=np.ones(10)*5
print("An array of 10 fives:")
print(arr)

4.2.import numpy as np
arr=np.arange(20,35,2)
print("An array of all even integers from 20 to 35:")
print(arr)

5.import numpy as np
x=np.arange(0,9).reshape((3,3))
print(x)

6.import numpy as np
arr=np.arange(20,35,2)
print("An array of all even integers from 20 to 35:")
print(arr)


7.import numpy as np
a=np.array([1,2,3])
b=np.array([4,5,6])
arr=np.concatenate((a,b))
print(arr)


8.import pandas as pd
data=[['tom',10],['nick',15],['juli',14]]
df=pd.DataFrame(data,columns=['Name','Ag'])
```

```
df
```

```
9.import pandas as pd
period=pd.date_range(start='1-1-2023',end='10-2-2023')
for val in period:
  print(val)
```

```
10.import pandas as pd
lst=[[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]
df=pd.DataFrame(lst,columns=['Tag','Name','Age'],dtype=float)
print(df)
```