

assignment_3

May 16, 2020

```
[6]: def f1(a,b):
      try:
          return a/b

      except Exception as e:
          print("you cannot divide by a zero, ",e)

      finally:
          print("Code is executed")

f1(5,0)
```

you cannot divide by a zero, division by zero
Code is executed

```
[31]: subjects=["Americans","Indians"]
      verbs=["play","watch"]
      objects=["Baseball","Cricket"]

      for i in subjects:
          for j in verbs:
              for k in objects:
                  print(i+" "+j+" "+k+".")

      print()
```

Americans play Baseball.
Americans play Cricket.
Americans watch Baseball.
Americans watch Cricket.
Indians play Baseball.
Indians play Cricket.
Indians watch Baseball.
Indians watch Cricket.

```
[34]: [i+j+k for k in objects for j in verbs for i in subjects]
```

```
[34]: ['AmericansplayBaseball',  
      'IndiansplayBaseball',  
      'AmericanswatchBaseball',  
      'IndianswatchBaseball',  
      'AmericansplayCricket',  
      'IndiansplayCricket',  
      'AmericanswatchCricket',  
      'IndianswatchCricket']
```

```
[12]: import numpy as np  
  
def fn_mat(inpvect, n, increasing=False):  
  
    res_mat = np.array([x**(n-1-i) for x in inpvect for i in range(n)]).  
    ↪reshape(inpvect.size,n)  
  
    return res_mat  
  
inpvect = np.array([1,2,3,4,5])  
n = 3  
  
fn_mat(inpvect, n)
```

```
[12]: array([[ 1,  1,  1],  
            [ 4,  2,  1],  
            [ 9,  3,  1],  
            [16,  4,  1],  
            [25,  5,  1]])
```

```
[ ]:
```