

Checkpoint Python

Question 1:

Entrée [30]:

```
a=[]
for i in range(2000,3201):
    if (i%7==0) and (i%5!=0):
        a.append(i)
print(a)
```

```
[2002, 2009, 2016, 2023, 2037, 2044, 2051, 2058, 2072, 2079, 2086, 2093, 2107, 2114, 2121, 2128, 2142, 2149, 2156, 2163, 2177, 2184, 2191, 2198, 2212, 2219, 2226, 2233, 2247, 2254, 2261, 2268, 2282, 2289, 2296, 2303, 2317, 2324, 2331, 2338, 2352, 2359, 2366, 2373, 2387, 2394, 2401, 2408, 2422, 2429, 2436, 2443, 2457, 2464, 2471, 2478, 2492, 2499, 2506, 2513, 2527, 2534, 2541, 2548, 2562, 2569, 2576, 2583, 2597, 2604, 2611, 2618, 2632, 2639, 2646, 2653, 2667, 2674, 2681, 2688, 2702, 2709, 2716, 2723, 2737, 2744, 2751, 2758, 2772, 2779, 2786, 2793, 2807, 2814, 2821, 2828, 2842, 2849, 2856, 2863, 2877, 2884, 2891, 2898, 2912, 2919, 2926, 2933, 2947, 2954, 2961, 2968, 2982, 2989, 2996, 3003, 3017, 3024, 3031, 3038, 3052, 3059, 3066, 3073, 3087, 3094, 3101, 3108, 3122, 3129, 3136, 3143, 3157, 3164, 3171, 3178, 3192, 3199]
```

Question 2:

Entrée [41]:

```
f=1
n=int(input("n="))
if(n<2):
    print("Le factoriel de ",n,"egale à 1")
else:
    for i in range(1,n+1):
        f=f*i
    print(f)
```

```
n=5
120
```

Question 3:

Entrée [35]:

```
dict={}
n=int(input('n='))
for i in range(1,n+1):
    dict[i]=i*i
print(dict)
```

```
n=8
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}
```

Question 4:

Entrée [21]:

```
Ch=str(input("Entrer une chaine de caracteres : "))
n=int(input("Entrer un entier : "))
for i in range(len(Ch)):
    if(i==n):
        Ch = Ch.replace(Ch[i],'')
print(Ch)
```

Entrer une chaine de caracteres : monia
Entrer un entier : 4
moni

Question 5:

Entrée [28]:

```
import numpy as np
a=np.array([[0,1],[2,3],[4,5]])
liste=a.tolist()
print('Le tableau est : ',a)
print('Le tableau apres la conversion en liste : ',liste)
```

Le tableau est :
[[0 1]
[2 3]
[4 5]]
Le tableau apres la conversion en liste :
[[0, 1], [2, 3], [4, 5]]

Question 6:

Entrée [29]:

```
import numpy as np
a=np.array([0,1,2])
b=np.array([2,1,0])
x=np.cov(a,b)
print(x)
```

[[1. -1.]
[-1. 1.]]

Question 7:

Entrée [38]:

```
from math import sqrt
C=50
H=30
D=int(input('D='))
Q=sqrt((2*C*D)/H)
print(Q)
```

```
D=20
8.16496580927726
```

Entrée []: