TD 1 INFORMATIQUE
LES SCRIPTS PYTHON (ESSAKET Dounia)

No 12

```python
puissance = str(2**1000)
resultat = 0
for i in puissance:
    resultat += int(i)
print(resultat)
```

No 22

```python
list=open("/Users/hendessaket/Downloads/p022_names.txt","r")
names=sorted(list)
alphabet={"A":1,"B":2,"C":3,"D":4,"E":5,"F":6,"G":7,"H":8,"I":9,"J":10,"K":11,"L":12,"M":13,"N":14,"O":15,"P":16,"Q":17,"R":18,"S":19,"T":20,"U":21,"V":22,"W":23,"X":24,"Y":25,"Z":26}
sum=0
for i,j in enumerate(names):
    temp=0
    for x in j:
        temp+=alphabet[x]
        sum+=temp*(i+1)
        print(sum)
```

entrée: fichier texte
sortie: nombre entier

No 55

```python
def is_palindromic(n): n=str(n); return n==n[::-1]
L = 10000
def is_lychrel(n, m=49):
  for _ in range(m):
      n+= int(str(n)[::-1])
      if is_palindromic(n): return 0
  return 1
print (sum(is_lychrel(n) for n in range(10, L)))
```

entrée: entier
sortie: entier