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100
Chp1 : TP N°2 Les Piles
Groupe : Ipein/SP2/GB
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# Pile
def creer_pile():
  l = list()
  return 1
   # return []
def pile_vide(p):
   return len(p)==0 # return p == []
def taille(p):
   return len(p)
def sommet(p):
  if not pile_vide(p):
     return p[-1] #p[len(p)-1]
   #return None
#test
p = creer_pile()
s = sommet(p)
if s != None:
print("sommet:",s+1)
def sommet1(p):
  assert not pile_vide(p)
   return p[-1]
#test
'''p = creer_pile()
try:
  s = sommet1(p)
except :
  print("pas de sommet")
else:
  print("sommet : ",s)'''
def empiler(p,x):
  p.append(x)
'''p = creer_pile()
empiler(p,3)'''
def depiler(p):
  if not pile_vide(p):
       x = p.pop()
      return x
   else:
      raise Exception("Pile vide")
#test
'''p = creer_pile()
try:
  s = depiler(p)
except:
  print("pile vide, pas sommet")'''
def depiler1(p):
  return p.pop()
# Ex 1
def conversion(n):
   p = creer_pile()
   if n==0: return '0b0'
   while n!=0 :
      r = n % 2
       empiler(p,r)
       q = n // 2
       n = q
   ch = '0b'
   for i in range(taille(p)):
      ch = ch + str(depiler(p))
   return ch
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def verif_parentheses(ch):
   p = creer_pile()
   L = []
   for i in range(len(ch)):
       if ch[i] == '(': empiler(p,i)
       elif ch[i] == ')':
            if pile_vide(p): return False
            t = (depiler(p),i)
            L.append(t)
   if pile_vide(p): return L
   return False
# Rest TODO
```