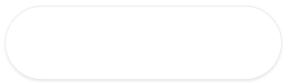
```
# GATE 2024
def f(x: int, y:int):
 for i in range(y):
   x = x+x+y
  return x
# GATE 2018
def fun(n: int):
 i = n
 j = 0
 sum = 0
 while i>1:
   j+=1
   i//=2
  while j>1:
   j//=2
   sum+=1
  return sum
def rq(x, y):
 r = x
 q = 0
 while (r>=y):
  r = r - y
   q = q+1
 return q, r
rq(45, 7)
→ (6, 3)
# GATE 2003
def findFunc(x, y):
 p = 1
 s = 1
 for i in range(1,y):
   p*=(x/i)
   s+=p
 return s
# GATE 2021
def inc():
 global i
  i += 1
 return i
count = 0
i = 0
for j in range(-3, 4):
if ((j>=0) and inc()):
   count += j
count += i
print(count)
<u>→</u> 10
```



```
7/9/24, 8:31 AM
```

```
def exp(X: int, Y: int):
 res = 1
 a = X
  b = Y
 while b!=0:
   if b%2 ==0:
     a = a*a
     b = b//2
   else:
     res = res*a
     b = b-1
  return res
e = "butter"
def f(a):
 print(print(a) or e)
f("bitter")
⇒ bitter
     butter
e = "butter"
def f(a):
 print(print(a) and e)
f("bitter")
→ bitter
     None
e = "butter"
def f(a):
 print(print(a)+5)
f("bitter")
⇒ bitter
                                             Traceback (most recent call last)
     TypeError
     <ipython-input-5-021373d4f8ff> in <cell line: 6>()
          4 print(print(a)+5)
     ----> 6 f("bitter")
     <ipython-input-5-021373d4f8ff> in f(a)
          3 def f(a):
     ---> 4 print(print(a)+5)
          5
           6 f("bitter")
     TypeError: unsupported operand type(s) for +: 'NoneType' and 'int'
 Next steps:
             Explain error
```

ISRO 2020

```
name = "satellites"
1 = len(name)
s = len(set(name))
val = ord(str(1)[0]) + ord(str(s))
def add(a,b):
  return a+b
def sub(a,b):
  return a-b
list_1 = [[sub, 0], [sub, 6], [add, 13], [sub, 2]]
for i in range(len(list_1)):
  print(chr(list_1[i][0](val, list_1[i][1])), sep="-")
\rightarrow
     а
     t
     е
def myX(E: list, size: int):
  Y = 0
  for i in range(size):
    Y = Y + E[i]
  for i in range(size):
    for j in range(i, size):
      Z = 0
      for k in range(i, j+1):
       Z = Z + E[k]
      if Z>Y:
       Y = Z
  return Y
```

