

## ACM RECRUITMENT TASKS:

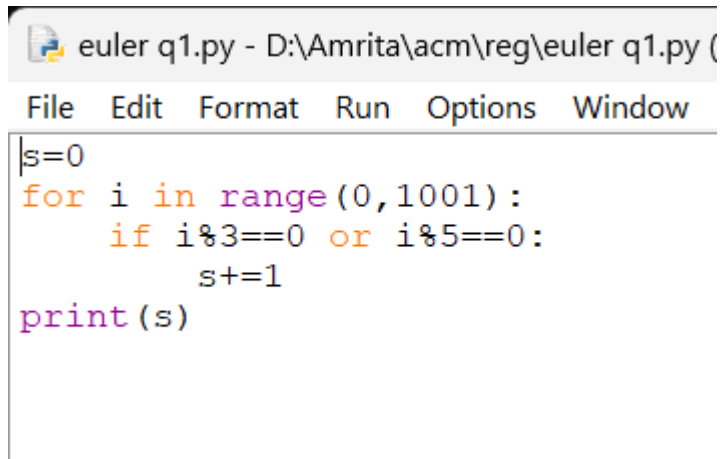
### PROJECT EULER

DEVIKA K ANIL

AM.EN.U4EAC24022

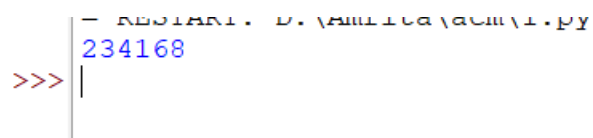
QUESTIONS: 1,2,5,6,7,9

Q.1



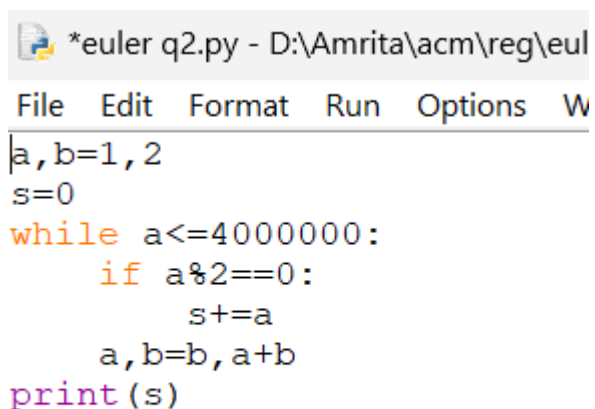
```
euler q1.py - D:\Amrita\acm\reg\euler q1.py (
File Edit Format Run Options Window
s=0
for i in range(0,1001):
    if i%3==0 or i%5==0:
        s+=1
print(s)
```

OUTPUT:



```
- RESTART: D:\Amrita\acm\reg\1.py
234168
>>> |
```

Q.2



```
*euler q2.py - D:\Amrita\acm\reg\eul
File Edit Format Run Options W
a,b=1,2
s=0
while a<=4000000:
    if a%2==0:
        s+=a
        a,b=b,a+b
print(s)
```

OUTPUT:

```
IDLE Shell 3.12.5
File Edit Shell Debug Options Window Help
Python 3.12.5 (tags/v3.12.5:ff3
AMD64) on win32
Type "help", "copyright", "cred
>>
= RESTART: D:\Amrita\acm\reg\eu
4613732
>> |
```

Q.6

```
euler q6.py - D:\Amrita\acm\reg\eule
File Edit Format Run Options W
s=0
p=1
for i in range(0,101):
    s+=i
p=s**2
#square of sum
y=0
for j in range(0,101):
    y+=(j**2)
#sum of squares
print(p-y)
```

OUTPUT:

```
IDLE Shell 3.12.5
File Edit Shell Debug Options Window Help
Python 3.12.5 (tags/v3.12.5:ff3bc82
AMD64) on win32
Type "help", "copyright", "credits"
>>>
===== RESTART: D:\Am
25164150
>>>
>>> |
```

Q.7

```
euler q7.py - D:\Amrita\acm\reg\euler q7.py (3.12.5)
File Edit Format Run Options Window Help
import math
n=2
c=0

def fn(num):
    if num <= 1:
        return False
    if num==2:
        return True
    if num%2==0:
        return False
    for i in range(3, int(math.sqrt(num)) + 1, 2):
        if num%i==0:
            return False
    return True
while c<10001:
    if fn(n):
        c+=1
    n+=1
print(n-1)
```

OUTPUT:


```
IDLE Shell 3.12.5
File Edit Shell Debug Options Window Help
Python 3.12.5 (tags/v3.12.5:ff3bc82, Aug 6 2024, AMD64) on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
= RESTART: D:\Amrita\acm\reg\euler q7.py
104743
>>> |
```

Q.9

```
euler q9.py - D:\Amrita\acm\reg\euler q9.py (3.12.5)
File Edit Format Run Options Window Help
def f(sum):
    for a in range(1, sum):
        for b in range(a, sum-a):
            c = sum-a-b
            if a**2+b**2==c**2:
                return a,b,c

sum=1000
p=1
t=f(sum)
if t:
    a,b,c=t
    p=a*b*c
    print("The numbers are:",a,',',b,',',c,)
else:
    print("Numbers not found")
```

OUTPUT:

 IDLE Shell 3.12.5

File Edit Shell Debug Options Window Help

Python 3.12.5 (tags/v3.12.5:ff3bc82, Aug 6 2024, 2  
AMD64) on win32

Type "help", "copyright", "credits" or "license()"

>>

= RESTART: D:/Amrita/acm/reg/euler q9.py

The numbers are: 200 , 375 , 425

>>

|