Assignment -1
Python Programming

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

Question-1:

Write a Python program to find the number of zeros at the end of a factorial of a given positive number.

Range of the number(n): (1 ≤ n ≤ 2*109).

Solution:

```
def factendzero(n):
 x = n // 5
 y = x
 while x > 0:
  x /= 5
  y += int(x)
 return y


print(factendzero(5))
print(factendzero(12))
print(factendzero(100))
```

output:

```
 1 ▾ def factendzero(n):
 2     x = n // 5
 3     y = x
 4 ▾   while x > 0:
 5       x /= 5
 6       y += int(x)
 7     return y
 8
 9   print(factendzero(5))
10   print(factendzero(12))
11   print(factendzero(100))
12
```

```
Shell
1
2
24
>
```

Question-2:

Write a Python program to find the number of divisors of a given integer is even or odd.

Solution:

```
def divisor(n):
  x = len([i for i in range(1,n+1) if not n % i])
  return x
print(divisor(15))
print(divisor(12))
print(divisor(9))
print(divisor(6))
print(divisor(3))
```

output:

```
 1 ▾ def divisor(n):
 2     x = len([i for i in range(1,n+1) if not n % i])
 3     return x
 4   print(divisor(15))
 5   print(divisor(12))
 6   print(divisor(9))
 7   print(divisor(6))
 8   print(divisor(3))
 9
```

```
Shell
4
6
3
4
2
>
```
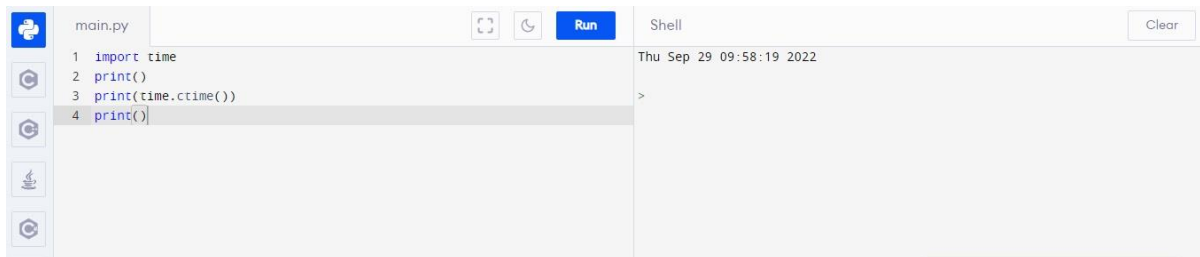
Question-3:

Write a Python program to get the system time

Note : The system time is important for debugging, network information, random number seeds, or something as simple as program performance.

Solution:

```
import time
print()
print(time.ctime())
print()
```
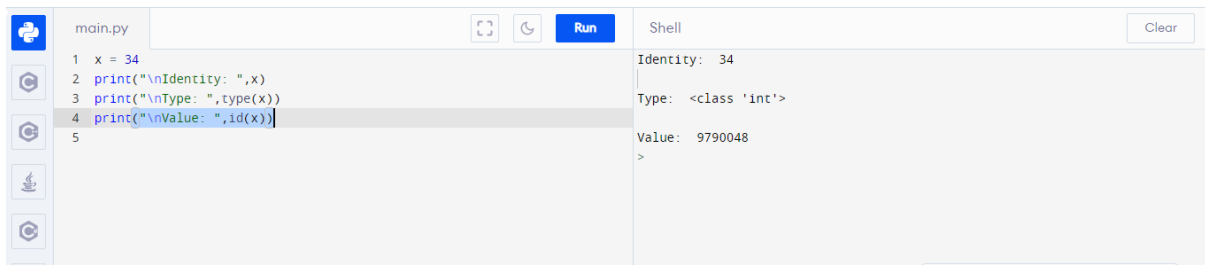
output:

Question-4:

Write a Python program to get the Identity, Type, and Value of an object

Solution:

```
x = 34
print("\nIdentity: ",x)
print("\nType: ",type(x))
print("\nValue: ",id(x))
```

output:

```
1  x = 34
2  print("\nIdentity: ",x)
3  print("\nType: ",type(x))
4  print("\nValue: ",id(x))
5
```

```
Identity:  34

Type:  <class 'int'>

Value:  9790048
>
```
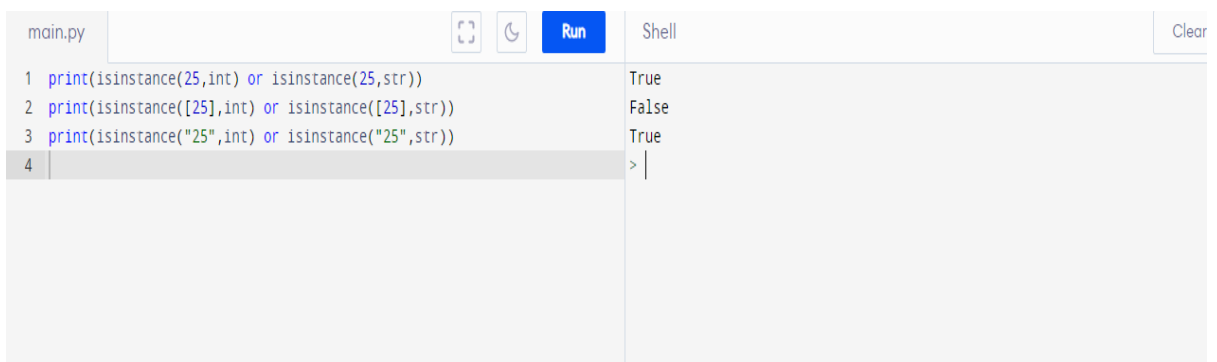
Question-5:

Write a Python program to check whether a variable is integer or string

Solution:

```
print(isinstance(25,int) or isinstance(25,str))
print(isinstance([25],int) or isinstance([25],str))
print(isinstance("25",int) or isinstance("25",str))
```

output:

```
1  print(isinstance(25,int) or isinstance(25,str))
2  print(isinstance([25],int) or isinstance([25],str))
3  print(isinstance("25",int) or isinstance("25",str))
4
```

```
True
False
True
>
```