In [1]:
```
square = lambda x: x*x
res = square(34)
print(res)
```

```
1156
```

In [2]:
```
mul = lambda a, b: a*b
res = mul(3,42)
print(res)
```

```
126
```

In [3]:
```
square = lambda x: x*x
res = square(34)
print(res)
```

```
1156
```

In [4]:
```
factorial = lambda a: a*factorial
res = factorial(4)
print(res)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/2944377056.py in <module>
      1 factorial = lambda a: a*factorial
----> 2 res = factorial(4)
      3 print(res)

C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/2944377056.py in <lambda>(a)
----> 1 factorial = lambda a: a*factorial
      2 res = factorial(4)
      3 print(res)

TypeError: unsupported operand type(s) for *: 'int' and 'function'
```

In [5]:
```
factorial = lambda a: a*factorial(a-1) if (a>1) else 1
res = factorial(4)
print(res)
```

```
24
```

In [6]:
```
lst = [1,5,7,9,10,12,14,32,85]      #lambda function using filter
newlst = list(filter(lambda a: a%2==0, lst))
print('even list:', newlst)
newlst2 = list(filter(lambda a: a%2!=0, lst))
print('odd list:', newlst2)
```

```
even list: [10, 12, 14, 32]
odd list: [1, 5, 7, 9, 85]
```

In [7]:
```
list = [21,312,4,34,54,65,67,87,67,23,1,32,2]
res = list(filter(lambda age: age>18, list))
print(res)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/1559293430.py in <module>
      1 list = [21,312,4,34,54,65,67,87,67,23,1,32,2]
----> 2 res = list(filter(lambda age: age>18, list))
      3 print(res)

TypeError: 'list' object is not callable
```

In [8]:
```
ages = [13, 90, 17, 59, 21, 60, 5]
adults = list(filter(lambda age: age>18, ages))
print(adults)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/4140926682.py in <module>
      1 ages = [13, 90, 17, 59, 21, 60, 5]
----> 2 adults = list(filter(lambda age: age>18, ages))
      3 print(adults)

TypeError: 'list' object is not callable
```

In [9]:
```
import math
sqrt = math.sqrt(234)
```

```
print(sqrt)
```

```
15.297058540778355
```

In [10]:
```
ceil = math.ceil(3.4)
print(ceil)
```

```
4
```

In [11]:
```
floor = math.floor(21.41)
print(floor)
```

```
21
```

In [12]:
```
pow = math.pow(23,3)
print(pow)
```

```
12167.0
```

In [13]:
```
pi = math.pi(0.5)
print(pi)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/432107157.py in <module>
----> 1 pi = math.pi(0.5)
      2 print(pi)

TypeError: 'float' object is not callable
```

In [14]:
```
pi = math.pi(1)
print(pi)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/1309304097.py in <module>
----> 1 pi = math.pi(1)
      2 print(pi)

TypeError: 'float' object is not callable
```

In [15]:
```
pi = math.pi()
print(pi)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/2590637831.py in <module>
----> 1 pi = math.pi()
      2 print(pi)

TypeError: 'float' object is not callable
```

In [16]:
```
print(math.pi)
```

```
3.141592653589793
```

In [18]:
```
print(f'{math.pi:.2f}'.format(math.pi))
```

```
3.14
```

In [18]:
```
print(f'{math.pi:.2f}'.format(math.pi))
```

```
3.14
```

In [19]:
```
print(f'{math.pi:.3f}'.format(math.pi))
```

```
3.142
```

In [20]:
```
print(math.tau)
```

```
6.283185307179586
```

In [21]:
```
print(math.inf)
```

```
inf
```

In [22]:
```
print(math.inf)
```

```
inf
```

In [23]:
```
print(math.-inf)
```

```
  File "C:\Users\PRATIK~1\AppData\Local\Temp/ipykernel_16372/261953756.py", line 1
    print(math.-inf)
                ^
SyntaxError: invalid syntax
```

In [24]:
```
print(-math.inf)
```

```
-inf
```

In [25]:
```
print(math.factorial(3))
```

```
6
```

In [26]:
```
print(math.factorial(4))
```

```
24
```

In [27]:
```
print(math.factorial(0))
```

```
1
```

In [28]:
```
print(math.factorial(5))
```

```
120
```

In [29]:
```
print(math.fmod(3,2))
```

```
1.0
```

In [30]:
```
print(math.sin(1.71))
```

```
0.990326804156158
```

In [31]:
```
print(math.sin(0))
```

```
0.0
```

In [32]:
```
print(math.sin(1))
```

```
0.8414709848078965
```

In [33]:
```
print(math.degrees(30))
```

```
1718.8733853924696
```

In [34]:
```
print(math.degrees(1))
```

```
57.29577951308232
```

In [35]:
```
print(math.radians(21))
```

```
0.3665191429188092
```

In [ ]:
```

```