In [2]:

```
#multiply argument x with y and print the result
mul=lambda x,y:x*y
print('4*5',mul(4,5))
print('8*9',mul(8,9))
print('4*5=',(lambda x,y:x*y)(4,5))
print('8*9=',(lambda x,y:x*y)(8,9))
```

```
4*5 20
8*9 72
4*5= 20
8*9= 72
```

In [3]:

```
# to find whether the given string starts with a given character
chk1=lambda s,c:True if s.startswith(c) else False
print(chk1('python','p'))
```

```
True
```

In [44]:

```
#to extract year,month,day and time from datetime.
import datetime
dt_now=datetime.datetime.now()

print('--------------------')
date_fn=lambda date:date.date()
day_fn=lambda date:date.day
month_fn=lambda date:date.month
year_fn=lambda date:date.year
print("Today's Date",date_fn)
print("Day",day_fn(dt_now))
print("Month",month_fn(dt_now))
print("Year",year_fn(dt_now))
print('--------------------')
time_fn=lambda t:t.time()
hour_fn=lambda t:t.hour
min_fn=lambda t:t.min
sec_fn=lambda t:t.second
print("time now",time_fn(dt_now))
print("Hour",hour_fn(dt_now))
print("Minutes",min_fn(dt_now))
print("Seconds",sec_fn(dt_now))
```

```
--------------------
Today's Date <function <lambda> at 0x0000016114021280>
Day 19
Month 12
Year 2022
--------------------
time now 17:29:17.828877
Hour 17
Minutes 0001-01-01 00:00:00
Seconds 17
```

In [13]:

```
# to sort a list of dictionaries based on a given key
#models=[{'make':'Nokia','model':'216','color':'black'},{'make':'MiMax','model':2,'color':'gold'},
# {'make':'Samsung','model':'7','color':'blue'}]
models=[{'make':'Nokia','model':'216','color':'black'},{'make':'MiMax','model':2,'color':'gold'},{'ma
print("original list of dictionaries:")
print(models)
sorted_models=sorted(models,key=lambda d:d['color'])
print("\n sorting the list of dictionaries")
print(sorted_models)
```

```
original list of dictionaries:
[{'make': 'Nokia', 'model': '216', 'color': 'black'}, {'make': 'MiMax', 'model': 2, 'co
lor': 'gold'}, {'make': 'Samsung', 'model': '7', 'color': 'blue'}]

 sorting the list of dictionaries
[{'make': 'Nokia', 'model': '216', 'color': 'black'}, {'make': 'Samsung', 'model': '7',
'color': 'blue'}, {'make': 'MiMax', 'model': 2, 'color': 'gold'}]
```

In [42]:

```
#given a list of strings remove all strings that have the first character as a digit.
l=["hi","1 good ","bad 3445","6 Good Day","Hello","234234"]
print(list(filter(lambda x:False if x[0].isdigit() else True,l)))
```

```
['hi', 'bad 3445', 'Hello']
```

In [29]:

```
#given a list of numbers find the maximum of the numbers
from functools import reduce
num_list=[23,45,12,47,54]
print(reduce(lambda x, y:x if x>y else y,num_list))
```

```
54
```

In [32]:

```
#given a list of tuples remove all the tuples where second element is not the factor of first element
from functools import reduce
lst=[(2,3),(4,2),(6,3),(6,4),(16,4),(64,8)]
print(list(filter(lambda x:True if x[0]%4==0 else False,lst)))
```

```
[(4, 2), (16, 4), (64, 8)]
```