In [1]:
```
#Create a set
num_set = set([0, 1, 2, 6, 4, 3])
for n in num_set:
    print(n, end=' ')
```

```
0 1 2 3 4 6
```

In [15]:
```
print("Creating a set using string:")
char_set = set("DigicommSemiconductor")
# Iterating using for loop
for val in char_set:
    print(val, end=' ')
```

```
Creating a set using string:
u n e t r g i o S m d D c
```

In [13]:
```
#max and min value in the sets:
def maxm(sets):
    return(max(sets))
def minm(sets):
    return(min(sets))

sets=set([2,4,7,3,1,8,0])
print(maxm(sets))
print(minm(sets))
```

```
8
0
```

In [18]:
```
#remove items from the sets:
def remove(initial_set):
    while initial_set:
        initial_set.pop()
        print(initial_set)

initial_set=set((2,4,6,3,8,0,5,1,7))
remove(initial_set)
```

```
{1, 2, 3, 4, 5, 6, 7, 8}
{2, 3, 4, 5, 6, 7, 8}
{3, 4, 5, 6, 7, 8}
{4, 5, 6, 7, 8}
{5, 6, 7, 8}
{6, 7, 8}
{7, 8}
{8}
set()
```

In [5]:
```
#check if two lists have at-least one element common:
def common_data(list1,list2):
    result=False
    for x in list1:
        for y in list2:
            if(x==y):
                result=True
                return result
    return result
a=[1,2,6,8,4]
b=[0,3,6,9,2]
print(common_data(a,b))
```

```
True
```

In [6]:
```
def intersection_of_sets(arr1,arr2,arr3):
    s1=set(arr1)
    s2=set(arr2)
    s3=set(arr3)
    set1=s1.intersection(s2)
    result_set=set1.intersection(s3)
    final_list=list(result_set)
    print(final_list)
arr1=[1,5,10,20,40,80,100]
arr2=[6,7,20,80,100]
arr3=[3,4,15,20,30,70,80,120]
intersection_of_sets(arr1,arr2,arr3)
```

```
[80, 20]
```

In [7]:
```
#count the number of vowels in the strng using set:
def vowel_count(str1):
    count=0
    vowel=set("aeiouAEIOU")
    for alphabet in str1:
        if alphabet in vowel:
            count=count+1
    print("no.of vowels:", count)
str="PythonProgramming"
vowel_count(str)
```

```
no.of vowels: 4
```

In [8]:
```
#accept the string which contain all vowels:
def check(string):
    string=string.lower()
    vowels=set("aeiou")
    s=set({})
    for char in string:
        if char in vowels:
            s.add(char)
        else:
            pass
    if len(s)==len(vowels):
        print("accepted")
    else:
        print("not accepted")
string="SEEqoUial"
check(string)
```

```
accepted
```

In [9]:
```
#decorates
def div(a,b):
    print(a/b)
def smart_div(func):
    def inner(a,b):
        if(a<b):
            a,b=b,a
        return func(a,b)
    return inner
div=smart_div(div)
div(2,4)
```

```
2.0
```

In [10]:
```
#rough_work
def div(a,b):
    if(a<b):
        a,b=b,a
    print(a/b)
div(2,4)
```

```
2.0
```

In [1]:
```
def order_pizza(a,b, *topings):
    match a:
        case "pizzamania":
            print("pizza mania")
            if b == "panbase":
                print(topings)
                return  200
            elif b == "cheeseburst":
                print(topings)
                return 400

        case "vegpizza":
            print("veg pizza")
            if b == "panbase":
                print(topings)
                return  500
            elif b == "cheeseburst":
                print(topings)
                return  700



pizzaKind = input("which pizza you want")
pizzabase  =input("which kind of base")
totalamount=order_pizza(pizzaKind ,pizzabase,"capsicum","onion")
print(totalamount)
```

```
veg pizza
('capsicum', 'onion')
500
```

In [ ]: