Assignment Day 2

```
Colours=['Black','Red','Blue']
for Colour in Colours:
    print(Colour)
```

```
Black
Red
Blue
```

```
Colours.append('White')
for Colour in Colours:
    print(Colour)
```

```
Black
Red
Blue
White
```

```
Colours.insert(1,'Grey')
for Colour in Colours:
    print(Colour)
```

```
Black
Grey
Red
Blue
White
```

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Agenda

```
arthimetic operator
assignment operator
comparison'
logical
identity
bitwise
```

```
#arthimetic operator
num_1=11
num_2=2
print(num_1+num_2)
print(num_1//num_2) # divion floor
```

```
print(num_1/num_2)# float
print(num_1%num_2)  #modulo gives remainder
```

```
13
5
5.5
1
```

```
#assignment operator
-=
+=
```

```
x+=5 #shorthand version
x=x+5
```

```
num_1=1
num_1+=5
print(num_1)
```

```
6
```

```
num_1=1
num_1-=2
print(num_1)
```

```
-1
```

```
x=11
x**=2 #x=x**2
print(x)
```

```
121
```

```
x=10
x<<=3
x=x<<3 #bitwise shifting left operator
print(x)
```

```
640
```

task 1

```
#Task 1
x=5
2=x%y
print(y)
```

```
  File "<ipython-input-20-0742d0e121e4>", line 3
    2=x%y
    ^
SyntaxError: cannot assign to literal
```

```
x=5
x=x%2
print(x)
```

```
1
```

```
x=81  # x//=?
print(x//10)
```

```
8
```

```
# comparison operators
!=
>=
<=
```

```
num_1=10
num_2=20
if num_1!=10:
   print("let's order pizza")
else:
    print("let's not order pizza")
```

```
let's not order pizza
```

```
#logical oerators
and
or
nor
```

```
num_1=0
num_2=4
print(num_1 and num_2)
```

```
0
```

```
num_1=5
num_2=4
print(num_1 and num_2) #logical and opeartor
```

```
4
```

```
# binary eqivalent
x=5=0101
y=4=0100
x & y 0100=4  //bitwise and operator
```

```
num_1=9
num_2=10
print(num_1 & num_2)
```

```
8
```

```
num_1=9
num_2=10
print(num_1 and num_2) #bitwise and operation
print(num_1 | num_2) #bitwise or operation
```

```
10
11
```

```
num_1=9
num_2=10
print(num_1 and num_2)  # more conditions will be checked
print(num_1 or num_2)   #1st condition is checked
```

```
10
9
```

task 2

```
num_1=5
num_2=20
print(num_1 and num_2)
```

```
20
```

```
# Identity operator
```

```
num_1=10
num_2=101
print(num_1 is num_2)
```

```
False
```

```
num_1=10
num_2=101
print(num_1 is not num_2)
```

```
True
```

Task3

```
x<<2=156
what is x?
```

```
624
```

```
# XOR Operator
```

```
x=5
y=8
print(x^y)
```

```
13
```

lists

```
# LISTS
collection of items

bikes=['honda','yamaha','suzuki']
print(bikes[0])
```

```
honda
```

```
print(bikes)
```

```
['honda', 'yamaha', 'suzuki']
```

```
print(bikes[-2]) #second last element
```

```
yamaha
```

```
invites=['mickey','donald','chipmunks']
for i in invites:
    print("welcome to dinner "+i)
```

```
welcome to dinner mickey
welcome to dinner donald
welcome to dinner chipmunks
```

```
print(f"{invites[0].title()} you are invited to dinner tonight, please
be on  time ")
print(f"{invites[1].title()} you are invited to dinner tonight, please
be on  time ")
print(f"{invites[2].title()} you are invited to dinner tonight, please
be on  time ")
```

```
Mickey you are invited to dinner tonight, please be on  time
Donald you are invited to dinner tonight, please be on  time
Chipmunks you are invited to dinner tonight, please be on  time
```

```
#insering element at the end
bikes.append('Ducati')
print(bikes)
```

```
['honda', 'yamaha', 'suzuki', 'Ducati', 'Ducati']
```

```
#insert at specific position
bikes.insert(1,'tvs')
print(bikes)
```

```
['honda', 'tvs', 'yamaha', 'suzuki', 'Ducati', 'Ducati']
```

Task 2

```
invites=['mickey','donald','chipmunks']
for i in invites:
```

```
    print("Hey ,ijust found a bigger table")
```

```
Hey ,ijust found a bigger table
Hey ,ijust found a bigger table
Hey ,ijust found a bigger table
```

```
invites.insert(2,'pooh')
```

```
invites.append('max')
```

```
print(invites)
```

```
['mickey', 'donald', 'pooh', 'chipmunks', 'max']
```

```
for i in invites:
    print("welcome to dinner " + i)
```

```
welcome to dinner mickey
welcome to dinner donald
welcome to dinner pooh
welcome to dinner chipmunks
welcome to dinner max
```

```
# Removing elements from a list
```

del() remove at a particular index

pop()

remove()

```
bikes=['honda','yamaha','suzuki','ducati','tvs']
del bikes[-2]
print(bikes)
```

```
['honda', 'yamaha', 'suzuki', 'tvs']
```

```
# remove iem from end of the list and also print the name of the item
in the list
removed_bikes=bikes.pop()
print(f"bikes removed from the list= {removed_bikes}")
```

```
bikes removed from the list= tvs
```

```
print(bikes)
```

```
['honda', 'yamaha', 'suzuki']
```

```
#remove an item using its value
bikes.remove('suzuki')
print(bikes)
```

```
['honda', 'yamaha']
```

Task 3

```
invites=['mickey','donald','chipmunks','scooby']
not_invites1=invites.pop(0)
print(f"i am sorry for not inviting {not_invites1}")
not_invites2=invites.pop()
print(f"i am sorry for not inviting {not_invites2}" )
```

```
i am sorry for not inviting mickey
i am sorry for not inviting scooby
```

```
print(invites)
```

```
['donald', 'chipmunks']
```

```
for i in invites:
    print("you are still invited "+i)
```

```
you are still invited donald
you are still invited chipmunks
```

```
bikes=['honda','yamaha','suzuki','ducati','tvs']
```

```
bikes.sort(reverse=True)
print(bikes)
```

```
['yamaha', 'tvs', 'suzuki', 'honda', 'ducati']
```

```
# reverse the list
bikes.reverse()
print(bikes)
```

```
['tvs', 'ducati', 'suzuki', 'yamaha', 'honda']
```

```
# FOR LOOP
```

```
bikes=['honda','yamaha','suzuki','ducati','tvs']
```

```
for bike in bikes:
    print(bike.title())
```

```
Tvs
Ducati
Suzuki
Yamaha
Honda
```

Task

```
pizzas=['marghrita','veggieforest','paneer_capsicum']
for pizza in pizzas:
    print(pizza.title())
```

```
Marghrita
Veggieforest
Paneer_Capsicum
```

```
pizzas=['marghrita','veggieforest','paneer_capsicum']
for pizza in pizzas:
    print("i like "+ pizza+" pizza")
print("i like all kind of pizza")
no_of_pizzas=len(pizzas)
print(f"total no of pizzas in thelist {no_of_pizzas}")
```

```
i like marghrita pizza
i like veggieforest pizza
i like paneer_capsicum pizza
i like all kind of pizza
total no of pizzas in thelist 3
```

```
pizzas=['marghrita','veggieforest','paneer_capsicum']
for pizza in pizzas:
    print("i like "+ pizza+" pizza")
print("i like all kind of pizza")
no_of_pizzas=len(pizzas)
print("total no of pizzas in the list " + str(no_of_pizzas))  #removed
typecasting error
```

```
i like marghrita pizza
i like veggieforest pizza
i like paneer_capsicum pizza
i like all kind of pizza
total no of pizzas in the list 3
```

```
# Numerical lists
range function
```

```
numbers=range(1,6)
print(numbers)
```

```
range(1, 6)
```

```
numbers=list(range(1,6))
numbers
```

```
[1, 2, 3, 4, 5]
```

```
for num in numbers:
    print(num)
```

```
1
2
3
4
5
```

```
for num in range(1,6):  #range(start, stop)
    print(num)
```

```
1
2
3
4
5
```

```
# print all even numbers between 10 and 21

even_numbers=list(range(10,21,2)) #range(start, stop, step)
for even_number in even_numbers:
    print(even_number)
```

```
10
12
14
16
18
20
```

```
#  print squares of numbers between 1 and 10
for num in range(1,10):
    print(pow(num,2))
```

```
1
4
9
16
25
36
49
64
81
```