(a) Write a python script to demonstrate membership and Identity Operators.

```
>>> students=["yatharth" , "yuvraj" , "yatri" ]
>>> print("yatharth" in students)
True
>>> print("yaaa" in students )
False
>>> print("efs" not in students)
True
>>>
```

```
>>> samplevar=10
>>> samplevar1=11
>>> samplevar2=12
>>> samplevar3=samplevar
>>> samplevar2=12
>>> print(samplevar is samplevar1)
False
>>> print(samplevar is not samplevar1)
True
>>> id(samplevar)
2783089263120
>>> id(samplevar3)
2783089263120
>>> id(samplevar2)
2783089263184
>>>
```

(b) Write a python script to demonstrate Selection Statement (if statement, elif and nested if)

```
==== RESTART: C:/Users/student/AppDa
enter name:ppsy
have a good day
>>>
==== RESTART: C:/Users/student/AppDa
enter name:ppsu
hi ppsu students
have a good day
>>>
```

a.py - C:/Users/student/AppData/Local/Programs/P

File Edit Format Run Options Window Help

```
uni= input ("enter name:")
if uni=="ppsu":
    print("hi ppsu students ")
print("have a good day")
```

```
==== RESTART: C:/Users/student/AppData/
enter name:ppsu
hi ppsu students
have a good day
>>>
==== RESTART: C:/Users/student/AppData/
enter name:ppsy
heloo
have a good day
>>>
```

a.py - C:/Users/student/AppData/Local/Programs/Pythor

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```
uni= input ("enter name:")
if uni=="ppsu":
    print("hi ppsu students ")
else:
    print("heloo")
print("have a good day")
```

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```
==== RESTART: C:/Users/st
enter namece
ce
have a good day
>>>
==== RESTART: C:/Users/st
enter nameece
other
have a good day
```

a.py - C:/Users/student/AppData/Loc

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```
dept=input("enter name")
if dept=="ce":
    print("ce")
elif dept=="cse":
    print("cse")
else:
    print("other")
print("have a good day")
```

#find if number is positive or negative or zero
#find max between 2 number
#find max between 3 number
#simple calculator

```
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Python/Pythc
enter number:2
number is positive
>>>
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Python/Pythc
enter number:0
number is zero
>>>
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Python/Pythc
enter number:-1
number is negative
>>>
```

a.py - C:/Users/JSK/AppData/Local/Programs/Python/Python310/a.py (3.10.4)

File Edit Format Run Options Window Help

```
n=int(input("enter number:"));
if (n>0):
    print("number is positive")
elif (n<0):
    print("number is negative")
else:
    print("number is zero")
```

```
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Pyth
Enter the first number: 1
Enter the second number: 3
3 is greater
>>>
```

a.py - C:/Users/JSK/AppData/Local/Programs/Python/Python310/a.py (3.10.4)

File Edit Format Run Options Window Help

```
# Python program to return maximum of two numbers

# Getting input from user
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))

# printing the maximum value
if(num1 > num2):
  print(num1, "is greater")
else:
    print(num2, "is greater")
```

```
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Py
Enter first number  : 2
Enter second number : 5
Enter third number  : 6
6 is the largest of three numbers.
>>>
```

a.py - C:/Users/JSK/AppData/Local/Programs/Python/Python310/a.py (3.10.4)

File Edit Format Run Options Window Help

```
a = int(input('Enter first number  : '))
b = int(input('Enter second number : '))
c = int(input('Enter third number  : '))

largest = 0

if a > b and a > c :
    largest = a
elif b > c :
    largest = b
else :
    largest = c

print(largest, "is the largest of three numbers.")
```

```
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Python/Python310/a.py ===
enter choice(+,-,*,/,%,**):+
enter first number:4
enter second number:6
4.0 + 6.0 = 10.0
>>>
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Python/Python310/a.py ===
enter choice(+,-,*,/,%,**):/
enter first number:46
enter second number:4
46.0 / 4.0 = 11.5
>>>
====== RESTART: C:/Users/JSK/AppData/Local/Programs/Python/Python310/a.py ===
enter choice(+,-,*,/,%,**):=
invalid choice
>>>
```

```
choice = input("enter choice(+,-,*,/,%,**):")

if choice in ('+','-','*','/','%','**'):
    num1=float(input("Enter first number:"))

    num2=float(input("enter second number:"))

    if choice =='+':
            print(num1, "+", num2, "=", num1+num2)
    elif choice == '-':
            print(num1, "+", num2, "=", num1+num2)
    elif choice == '*':
            print(num1, "*", num2, "=", num1*num2)
    elif choice == '/':
            print(num1, "/", num2, "=", num1/num2)
    elif choice == '%':
            print(num1, "%", num2, "=", num1%num2)
    elif choice == '**':
            print(num1, "**", num2, "=", num1**num2)
else:
    print("invalid choice")
```