EXPERIMENT 1

```python
print("Hello everyone !!!\n")
print("Hello\nWorld\n")
str1='''Hello
    World\n'''
print(str1)
print('''Rohit's date of birth is 12/05/1999\n''')
x="Hello\n"
print(x)
inte=int(input("Enter an Integar: "))
flo=float(input("Enter a Float Value: "))
string=str(input("Enter a String: "))
print(inte)
print(flo)
print(string)
a=input("Enter your first name: ")
b=input("Enter your last name: ")
print("Your name is ",a+b)
c=input("enter your nickname: ")
print("\nYour Name is: ",a," ( ",c," ) ",b)
sap=590011871
dob="30 August 2006"
addr='''UPES
        Bidholi Campus
        PINCODE=248007'''
pr="AI & ML"
sem="Semester 2"
print("\nNAME : ",a+b)
print("SAP ID : ",sap)
print("DATE OF BIRTH : ",dob)
print("ADDRESS : ",addr)
print("Programme : ",pr)
print("Semester", sem)
```

EXPERIMENT 2

```python
x=9
y=7
print("Addition : ",x+y)
print("Subtraction : ",x-y)
print("Multiplication : ",x*y)
print("Division : ", x/y)
rad=float(input("Enter the radius of the circle : "))
area=3.14159*rad*rad
print("Area of Circle : ", area)
print("If x=",x," and y=",y)
eq=(x+y)*(x+y)
print("\nThe Solution of Equation (x+y)*(x+y) will be : ",eq)
base=float(input("Enter the base of the Right Triangle: "))
perp=float(input("\nEnter the perpendicular of the triangle: "))
hypo=((base*base)+(perp*perp))**0.5
print("\nThe Hypotenuse of the triangle will be : ",hypo)
print("\nLets Calculate Simple Intrest\n")
```

```python
pri=float(input("Enter the principal: "))
rate=float(input("Enter rate of interest in percentage per annum: "))
time=float(input("Enter the Time period (In years): "))
si=(pri*rate*time)/100
print("The Simple Interest will be : ", si)

print("\nFinding area of triangle from length of sides\n")
s1=float(input("Enter Base: "))
s2=float(input("Enter Height: "))
tarea=(s1*s2)/2
print("The area of triangle will be: ",tarea)

sec=int(input("Enter seconds: "))
hours=sec/3600
mins=(sec-(hours*3600))/60
secs=(mins%60)/60
print("The time will be: ",hours, mins, secs)

#Number swap
a=3
b=4
print(a,b)
a,b=b,a
print(a,b)

#Sum of n natural nos
n = int(input("Enter the value of n: "))
sum_natural = n * (n + 1) // 2  # Using the formula n(n+1)/2
print(f"The sum of the first {n} natural numbers is {sum_natural}.")


#Write a program to find left shift and right shift values of a
given number.
num = int(input("Enter a number: "))
shift = int(input("Enter the number of positions to shift: "))

left_shift = num << shift  # Left shift
right_shift = num >> shift  # Right shift

print(f"Left shift of {num} by {shift} positions: {left_shift}")
print(f"Right shift of {num} by {shift} positions: {right_shift}")

#Using membership operator find whether a given number is in
sequence (10,20,56,78,89)
sequence = (10, 20, 56, 78, 89)
num = int(input("Enter a number: "))

if num in sequence:
    print(f"{num} is in the sequence {sequence}.")
else:
```

```python
        print(f"{num} is not in the sequence {sequence}.")

string = input("Enter a string: ")
char = input("Enter a character to search for: ")

#Using membership operator find whether a given character is in a
string.
if char in string:
    print(f"The character '{char}' is present in the string.")
else:
    print(f"The character '{char}' is not present in the string.")
```