**Day-1 Assignment**

1. **Write a program find square root of a number.**

**def sqrt(c):**

**d=c\*\*(1/2)**

**print(d)**

**try:**

**a=int(input("Enter the number value:"))**

**d=a\*\*(1/2)**

**print(d)**

**except:**

**print('Please enter a number')**

1. **Python Program to find the area of triangle**

**def tarea(a,b,c):**

**s=(a+b+c)/2**

**area = (s\*(s-a)\*(s-b)\*(s-c)) \*\* 0.5**

**print(area)**

**try:**

**a=int(input("Enter the ist value:"))**

**b=int(input("Enter the 2nd value:"))**

**c=int(input("Enter the 3rd value:"))**

**s=(a+b+c)/2**

**area = (s\*(s-a)\*(s-b)\*(s-c)) \*\* 0.5**

**print(round(area,2))**

**except:**

**print('Please enter a number')**

1. **Python program to swap two variables provided by the user without temporary variable**

**a=int(input("Enter value of first variable: "))**

**b=int(input("Enter value of second variable: "))**

**a,b=b,a**

**print(a,b)**

1. **Python program to check if the input year is a leap year or not**

**def leap\_year(year):**

**if (year % 4 == 0 and year % 100 != 0) or year % 400 == 0:**

**print(year,"is a leap year")**

**else:**

**print(year,"is not a leap year")**

**5. Program to display the Fibonacci sequence up to n-th term where n is provided by the user**

**n=int(input("nth term of fibonacci series"))**

**a=0**

**b=1**

**temp=0**

**i=1**

**while i<=n:**

**print(a)**

**temp=b**

**b=a+b**

**a=temp**

**i=i+1**

**6. Python program to check if the number provided by the user is an Armstrong number or not**

**num = int(input("Enter a number: "))**

**sum = 0**

**temp = num**

**while temp > 0:**

**digit = temp % 10**

**sum += digit \*\* 3**

**temp //= 10**

**if num == sum:**

**print(num,"is an Armstrong number")**

**else:**

**print(num,"is not an Armstrong number")**

**7. Python Program to display the powers of 2 using anonymous function**

**terms = int(input("How many terms? "))**

**result = list(map(lambda x: 2 \*\* x, range(terms)))**

**for i in range(terms):**

**print("2 raised to power",i,"is",result[i])**