

#1) Write a Python Program for checking whether the given number is an even number or not.

```
n=int(input("Enter a number: "))
if n%2==0:
    print(n," is an even number")
else:
    print(n, " is an odd number")
```

↻ Enter a number: 5
5 is an odd number

#2) Write a Python Program to check leap year

```
print("Check if a Year is a Leap Year")
```

```
year = int(input("Enter a 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")
```

↻ Check if a Year is a Leap Year
Enter a year: 2020
2020 is a Leap Year

#3) Write a Python Program to Add Two Matrices.

```
print("Add Two Matrices")
```

```
# Input matrix size
```

```
rows = int(input("Enter number of rows: "))
cols = int(input("Enter number of columns: "))
```

```
# Input first matrix
```

```
print("Enter elements of first matrix:")
```

```
matrix1 = []
for i in range(rows):
    row = []
    for j in range(cols):
        element = int(input(f"Element [{i}][{j}]: "))
        row.append(element)
    matrix1.append(row)
```

```
# Input second matrix
```

```
print("Enter elements of second matrix:")
```

```
matrix2 = []
for i in range(rows):
    row = []
    for j in range(cols):
        element = int(input(f"Element [{i}][{j}]: "))
        row.append(element)
    matrix2.append(row)
```

```
# Add the matrices
```

```
result = []
for i in range(rows):
    row = []
    for j in range(cols):
        row.append(matrix1[i][j] + matrix2[i][j])
    result.append(row)
```

```
# Display the result
```

```
print("Resultant Matrix after Addition:")
for row in result:
    print(row)
```

↻ Add Two Matrices
Enter number of rows: 2
Enter number of columns: 2
Enter elements of first matrix:
Element [0][0]: 1
Element [0][1]: 2
Element [1][0]: 1
Element [1][1]: 2
Enter elements of second matrix:
Element [0][0]: 2
Element [0][1]: 1
Element [1][0]: 2
Element [1][1]: 1
Resultant Matrix after Addition:

```
[3, 3]  
[3, 3]
```