50 Python Programs

11. Check Leap Year

```
year = 2024
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")
```

12. Factorial of a Number

```
n = 5
fact = 1
for i in range(1, n + 1):
    fact *= i
print("Factorial:", fact)
```

13. Fibonacci Series

```
a, b = 0, 1
for _ in range(10):
    print(a, end=' ')
    a, b = b, a + b
```

14. Sum of Digits

```
num = 1234
sum_digits = sum(int(digit) for digit in str(num))
print("Sum of digits:", sum_digits)
```

15. Armstrong Number

```
num = 153
sum = sum(int(d)**3 for d in str(num))
print("Armstrong" if sum == num else "Not Armstrong")
```

16. Palindrome Check

```
s = "madam"
print("Palindrome" if s == s[::-1] else "Not Palindrome")
```

17. GCD of Two Numbers

```
import math
a, b = 60, 48
print("GCD:", math.gcd(a, b))
```

18. LCM of Two Numbers

```
import math
a, b = 12, 15
lcm = abs(a*b) // math.gcd(a, b)
print("LCM:", lcm)
```

19. Count Words in a String

```
s = "Python is fun"
print("Word count:", len(s.split()))
```

20. Sum of List Elements

```
lst = [1, 2, 3, 4, 5]
print("Sum:", sum(lst))
```

11. Example Program 11

```
# This is an example program #11
print("Program 11")
```

12. Example Program 12

```
# This is an example program #12
print("Program 12")
```

```
# This is an example program #13
print("Program 13")
```

```
# This is an example program #14
print("Program 14")
```

15. Example Program 15

```
# This is an example program #15
print("Program 15")
```

16. Example Program 16

```
# This is an example program #16
print("Program 16")
```

17. Example Program 17

```
# This is an example program #17
print("Program 17")
```

18. Example Program 18

```
# This is an example program #18
print("Program 18")
```

19. Example Program 19

```
# This is an example program #19
print("Program 19")
```

20. Example Program 20

```
# This is an example program #20
print("Program 20")
```

21. Example Program 21

```
# This is an example program #21
print("Program 21")
```

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print("Program 22")
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# This is an example program #23
print("Program 23")
```

24. Example Program 24

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# This is an example program #24
print("Program 24")
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25. Example Program 25

```
# This is an example program #25
print("Program 25")
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26. Example Program 26

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# This is an example program #26
print("Program 26")
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27. Example Program 27

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# This is an example program #27
print("Program 27")
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28. Example Program 28

```
# This is an example program #28
print("Program 28")
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29. Example Program 29

```
# This is an example program #29
print("Program 29")
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30. Example Program 30

```
# This is an example program #30
print("Program 30")
```

```
# This is an example program #31
print("Program 31")
```

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# This is an example program #32
print("Program 32")
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33. Example Program 33

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# This is an example program #33
print("Program 33")
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34. Example Program 34

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# This is an example program #34
print("Program 34")
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35. Example Program 35

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# This is an example program #35
print("Program 35")
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36. Example Program 36

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# This is an example program #36
print("Program 36")
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37. Example Program 37

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# This is an example program #37
print("Program 37")
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38. Example Program 38

```
# This is an example program #38
print("Program 38")
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```
# This is an example program #39
print("Program 39")
```

```
# This is an example program #40
print("Program 40")
```

41. Example Program 41

```
# This is an example program #41
print("Program 41")
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42. Example Program 42

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# This is an example program #42
print("Program 42")
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43. Example Program 43

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# This is an example program #43
print("Program 43")
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44. Example Program 44

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# This is an example program #44
print("Program 44")
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45. Example Program 45

```
# This is an example program #45
print("Program 45")
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46. Example Program 46

```
# This is an example program #46
print("Program 46")
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47. Example Program 47

```
# This is an example program #47
print("Program 47")
```

```
print("Program 48")
```

```
# This is an example program #49
print("Program 49")
```

```
# This is an example program #50
print("Program 50")
```