1) Write a python program to check the given number is even or odd using if-else construct. ¶

In [1]:

```
n = int(input("Enter an integer: "))
if n % 2 == 0:
    print("Even")
else:
    print("Odd")
```

```
Enter an integer: 5
Odd
```

2) Write a python program to print the largest of three numbers using if construct.

In [2]:

```
n1 = int(input("Enter 1st integer: "))
n2 = int(input("Enter 2nd integer: "))
n3 = int(input("Enter 3rd integer: "))
if n2 <= n1 >= n3: # HERE n1 SHOULD BE IN MIDDLE, COZ THAT IS COMMON IN BETWEEN THAT AND CO
    print(n1, "is greatest")
elif n2 >= n3:
    print(n2, "is greatest")
else:
    print(n3, "is greatest")
```

```
Enter 1st integer: 5
Enter 2nd integer: 2
Enter 3rd integer: 3
5 is greatest
```

3) Write a python program to check the given number is positive, negative or zero using if-else construct.

In [3]:

```
n = int(input("Enter an integer: "))
if n > 0:
    print(n, "is positive")
elif n < 0:
    print(n, "is negative")
elif n == 0:
    print(n, "is zero")
else:
    print("In valid input")
```

```
Enter an integer: -3
-3 is negative
```

4) Write a python program the grade of the student using if-else construct

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In [4]:

```
n = int(input("Enter score out of 100: "))
if n >= 90:
    g = "S"
elif n >= 80:
    g = "A"
elif n >= 70:
    g = "B"
elif n >= 60:
    g = "C"
elif n >= 50:
    g = "D"
elif n >= 40:
    g = "E"
else:
    g = "F"
print(g, "Grade")
```

```
Enter score out of 100: 80
A Grade
```

5) Write a python program to perform arithmetic operations.

In [5]:

```
a = 10.5
b = 5
print(a, "+", b, "=", a + b)
print(a, "-", b, "=", a - b)
print(a, "*", b, "=", a * b)
print(a, "**", b, "=", a ** b)
print(a, "/", b, "=", a / b)
print(a, "//", b, "=", a // b)
```

```
10.5 + 5 = 15.5
10.5 - 5 = 5.5
10.5 * 5 = 52.5
10.5 ** 5 = 127628.15625
10.5 / 5 = 2.1
10.5 // 5 = 2.0
```

6) Write a python program to check the type of triangle.

In [7]:

```
a = float(input("Enter the value of 1st side: "))
b = float(input("Enter the value of 2nd side: "))
c = float(input("Enter the value of 3rd side: "))
if a == b and b == c: # a == b == c
    print("Equilateral Triangle")
elif a == b or b == c or c == a:
    print("Isosceles Triangle")
else:
    print("Scalene Triangle")
```

```
Enter the value of 1st side: 5.5
Enter the value of 2nd side: 5.5
Enter the value of 3rd side: 2
Isosceles Triangle
```

7) Write a program to print the square of two numbers from a given list l= [2,4,6,8,10] using for loop construct.

In [8]:

```
for i in [2, 4, 6, 8, 10]:
    print(i ** 2, end=", ")
```

```
4, 16, 36, 64, 100,
```

8) Write a program to print the sum of all numbers of the given list l= [25,42,32,12,33] using for loop construct.

In [10]:

```
l = [25, 42, 32, 12, 33]
total = 0
for ele in l:
    total += ele
print(total)
```

```
144
```

9) Write a program to find the sum of first n natural number using range() function.

In [14]:

```
n = int(input("Enter an integer: "))
# total = 0
# for i in range(1, n+1):
#     total += i
total = sum(range(1, n+1))
print(total)
```

```
Enter an integer: 5
15
```

10) Write a python program to check the given number is prime or not.

In [20]:

```
from math import sqrt, ceil
n = int(input("Enter an integer: "))
# flag = True
# for i in range(2, ceil(sqrt(n))):
#     if n % i == 0:
#         flag = False
#         break
# if flag:
#     print(n, "is prime")
# else:
#     print(n, "is not prime")

for i in range(2, ceil(sqrt(n))):
    if n % i == 0:
        print(n, "is not prime")
else:
    print(n, "is prime")
```

```
Enter an integer: 19
19 is prime
```

11) Write a python program to print the table of a given number using while loop.

In [21]:

```
n = int(input("Enter an integer: "))
for i in range(1, 11):
    print(f"{n} x {i} = {n * i}")
```

```
Enter an integer: 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

In [ ]:

```

```