



```
a=int(input("enter a number:"))
b=int(input("enter a number:"))
print("Sum",a+b)
print("Diff",a-b)
print("Product",a*b)
print("Division",a/b)
print("Reminder",a%b)
print("Quotient",a//b)
print("exponent",a**b)
```

▼ ... enter a number:22
enter a number:2
Sum 24
Diff 20
Product 44
Division 11.0
Reminder 0
Quotient 11
exponent 484

[]

```
a=int(input("enter a number:"))
b=int(input("enter b number:"))
c=int(input("enter c number:"))
if a>b and a<c:
    print("A is the biggest number compared to b")
elif a>b or a>c:
    print("A is the biggest number")
elif a<b and a<c:
    print("A is the smallest number")
```

▼ enter a number:22
enter b number:44
enter c number:55
A is the smallest number

[]

```
m1=int(input("enter a marks:"))
m2=int(input("enter a marks:"))
m3=int(input("enter a marks:"))
m4=int(input("enter a marks:"))
grade=m1+m2+m3+m4/4
if grade>=60:
    print("pass")
else:
    print("fail")
```

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✓ RAM [] Disk []

Quotient 11
exponent 484

↑ ↓ ✎ 🗑 ⋮

[]

```
a=int(input("enter a number:"))
b=int(input("enter b number:"))
c=int(input("enter c number:"))
if a>b and a<c:
    print("A is the biggest number compared to b")
elif a>b or a>c:
    print("A is the biggest number")
elif a<b and a<c:
    print("A is the smallest number")
```

▼

```
enter a number:22
enter b number:44
enter c number:55
A is the smallest number
```

[10]

✓ 11s

```
m1=int(input("enter a marks:"))
m2=int(input("enter a marks:"))
m3=int(input("enter a marks:"))
m4=int(input("enter a marks:"))
grade=m1+m2+m3+m4/4
if grade>=60:
    print("pass")
else:
    print("fail")
```

▼

```
enter a marks:19
enter a marks:15
enter a marks:17
enter a marks:20
fail
```

[2]

✓ 0s

```
print("hello","world")
```

▼

```
hello world
```

```
a= 1234  
n=a%10  
print(n%2==0)
```

↑ ↓ ⌂ ⌄ ⌅

... True

```
a=1234  
print(a>10 and (a%10)%2==0)
```

True

```
s="""Janu"""
print (s)
```

Janu

```
a=1000  
b=1000  
print(a is b)
```

False

```
a= int(input ("enter a num"))
b=int(input("enter b num"))
print ("sum",a+b)
print ("diff",a-b)
print ("product",a*b)
print ("division",a/b)
print ("floor division",a//b)
print ("exponent",a**b)
```

enter a num10

enter b num20

sum 30

diff -10

product 200

division 0.5

floor division 0

exponent 100

exponent 10000000000000000000

```
M1=int(input("enter M1 marks"))
M2= int(input ("enter M2 marks"))
M3=int(input("enter M3 marks"))
print (M1>=35 and M2>=55 or M3>=35)
```

```
enter M1 marks23
enter M2 marks21
enter M3 marks24
False
```

```
for i in range (2,51,2):  
    print (i)
```

2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
41
41
41
41
41
5

#avg of 4 sub
m1=52

```
[ ] #avg of 4 sub  
sub1= float(input("enter marks of sub 1:"))  
sub2= float(input("enter marks of sub 2:"))  
sub3= float(input("enter marks of sub 3:"))  
sub4= float(input("enter marks of sub 4:"))  
avg=(sub1+sub2+ sub3+ sub4)/4  
print("avg marks=",avg)
```

enter marks of sub 1:77
enter marks of sub 2:87
enter marks of sub 3:97
enter marks of sub 4:94
avg marks= 88.75

```
[ ] #boolean data type  
a=7  
b=9  
print (a>b)
```

False

```
[ ] #area of circle  
Pi=3.14  
r=5  
area=Pi*r**r  
print ("area of a circle :",area)
```

area of a circle : 78.5

[22]

✓ 5s

```
▶ m1=int(input("Enter subject1 marks:"))
m2=int(input("Enter subject2 marks:"))
m3=int(input("Enter subject3 marks:"))
total=m1+m2+m3
avg=total/3
if m1>100 or m2>100 or m3>100:
    print("Invalid marks")
else:
    if avg>=90:
        print("Grade A")
    elif avg>=75:
        print("Grade B")
    elif avg>=60:
        print("Grade C")
    elif avg>=40:
        print("Grade D")
    else:
        print("Fail")
```

... Enter subject1 marks:200
Enter subject2 marks:89
Enter subject3 marks:56
Invalid marks

↑ ↓ ⚪ 🖊 :

[78]

✓ 8s

```
▶ a=int(input("enter the 1stvalue of a side:"))
b=int(input("enter the 2ndvalue of a side:"))
c=int(input("enter the 3rdvalue of a side:"))
if a+b>c and b+c>a and a+c>b:
    if a==c and b==c and a==b:
        print("equilateral triangle")
    elif a==b or b==a or c==a:
        print("Isosceles triangle")
    else:
        print("Scalene triangle")
else:
    print("Invalid triangle")
```

... enter the 1stvalue of a side:17
enter the 2ndvalue of a side:8
enter the 3rdvalue of a side:2
Invalid triangle

```
Enter subject1 marks:200
Enter subject2 marks:89
Enter subject3 marks:56
Invalid marks
```

[80]

```
a=int(input("enter the 1stvalue of a side:"))
b=int(input("enter the 2ndvalue of a side:"))
c=int(input("enter the 3rdvalue of a side:"))
if a+b>c or b+c>a or a+c>b:
    if a==c and b==c and a==b:
        print("equilateral triangle")
    elif a==b or b==a or c==a:
        print("Isosceles triangle")
    else:
        print("Scalene triangle")
else:
    print("Invalid triangle")
```

```
enter the 1stvalue of a side:10
enter the 2ndvalue of a side:10
enter the 3rdvalue of a side:10
equilateral triangle
```

[92]

✓ 6s



↑ ↓ ✎ 🗑 :

```
salary=int(input("enter salary:"))
experience=int(input("enter years of experience"))
bonus1=salary/100*10+salary
bonus2=salary/100*20+salary
if salary<20000 and experience>=2:
    print("Total salary:",bonus1)
elif salary<20000 and experience>=5:
    print("Total salary:",bonus2)
else:
    print("No bonus")
```

```
... enter salary:18000
enter years of experience:2
Total salary: 19800.0
```

Total salary: 19800.0

[13]

✓ 2s

```
▶ x=int(input("enter a number:"))
if x%3==0 and x%5!=0 :
    print("Special number")
else:
    print("Not a special number")
```

enter a number:18

Special number

[34]

✓ 3s

```
▶ time=int(input("enter time:"))
if time>0 and time<=23:
    if time==5 or time<=11:
        print("Good morning")
    elif time==12 or time<=16:
        print("Good afternoon")
    elif time==17 or time<=20:
        print("Good evening")
    else:
        print("Good night")
else:
    print("invalid time")
```

... enter time:16

Good afternoon



[54]

✓ 11s

```
▶ a=int(input("enter a number:"))
b=int(input("enter b number:"))
c=int(input("enter c number:"))
if a>b and a<c or a<b and a>c:
    print("a is the middle value")
elif b>a and b<c or b<a and b>c:
    print("b is the middle value")
else:
    print("c is the middle value")
```

... enter a number:56

enter b number:100

enter c number:23

a is the middle value



```
marks=int(input("enter marks\nsparent=int(input("enter 0 or 1:\nif sparent==1 and marks>=85:\n    print("gets scholarship")\nelse:\n    income=int(input("enter income:\n    if marks>=85 and income<=5000:\n        print("get scholarship")\n    else:\n        print("No scholarship")\n\n
```

... enter marks:89
enter 0 or 1:0
enter income:59600
get scholarship



```
def count_and_reverse(n):
```

```
    """
```

Counts the number of digits

Handles negative numbers

and reapplying the sign

```
    """
```

```
    if n == 0:
```

```
        return 1, 0
```

```
    num = abs(n) # Work with positive numbers
```

```
    count = 0
```

```
    reverse = 0
```

```
    while num != 0:
```

```
        digit = num % 10
```

```
        reverse = reverse * 10
```

```
        num //= 10
```

```
        count += 1
```

```
    if n < 0:
```

```
        reverse = -reverse
```

```
    return count, reverse
```

```
number = 1234
```

```
count, reversed_num = count_and_reverse(number)
```

```
print(f"Input: {number}")
```

```
print(f"Reversed number: {reversed_num}")
```

...

```
Input: 1234
```

```
Reversed number: 4321
```

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Connect ▾ ▾

[]



print



re

▼

... Input: 1234

Reversed number: 4321

```
[ ]     num = 1234
        reversed_num = 0

        print("Original number:", nu
              while num > 0:

                  digit = num % 10

                  reversed_num = reversed_
                  num = num // 10

                  print("Reversed number:", re
```

Original number: 1234
Reversed number: 4321

```
[ ]     for i in range(1,11):
            if i == 5:
                break
            print(i)
```

```
[ ]     for i in range(1,11):  
          if i == 5:  
              break  
      print(i)
```

▼ 5

```
[ ]     i= "Jahnavi"  
          for char in i:  
              print (char)
```

▼ J
a
h
n
a
v
i

```
[ ]     i="Jahnavi"  
          for char in i:  
              print (char,end="")
```

▼ Jahnavi

```
[ ]
```

```
my_array = [6,7,8,9,10]

print("Elements of the array")
for element in my_array:
    print(element)
```

▼

```
Elements of the array:
6
7
8
9
10
```

```
[ ]
```

```
my_list = [10, 20, 30, 40, 5
count = 0
for element in my_list:
    count += 1
print(f"The list is: {my_li
print(f"The number of elemen
```

▼

```
The list is: [10, 20, 30,
The number of elements in
```

8
9
10

[]

```
my_list = [10, 20, 30, 40, 50]
count = 0
for element in my_list:
    count += 1
print(f"The list is: {my_list}")
print(f"The number of elements in
```

▼

The list is: [10, 20, 30,
The number of elements in

[]

```
def sum_array_elements(arr):
    return sum(arr)
my_array = [10, 20, 30, 40,
total_sum = sum_array_eleme
print(f"The array is: {my_ar
print(f"The sum of elements
```

▼

The array is: [10, 20, 30,
The sum of elements is: 15

9
10

[]

0]

```
t}")  
ts in the list is: {count}")
```

▼

The list is: [10, 20, 30,
The number of elements in

[]

```
def sum_array_elements(arr):  
    return sum(arr)  
my_array = [10, 20, 30, 40,  
total_sum = sum_array_eleme  
print(f"The array is: {my_ar  
print(f"The sum of elements
```

▼

The array is: [10, 20, 30,
The sum of elements is: 15

9
10

[] 0]

t}")
ts in the list is: {count}")

▼ The list is: [10, 20, 30,
The number of elements in

[]

elements(arr):

0, 30, 40, 50]
rray_elements(my_array)
is: {my_array}")
f elements is: {total_sum}")

▼

ay is: [10, 20, 30, 40, 50]
of elements is: 150

[]

```
numbers = [10, 20, 30, 40, 5
sum_even_indices = 0
for i in range(0, len(numbers)):
    sum_even_indices += numbers[i]
print(f"The list is: {numbers}")
print(f"The sum of elements at even indices is: {sum_even_indices}")
sum_even_indices_concise = sum(numbers[i] for i in range(0, len(numbers), 2))
print(f"Concise code result: {sum_even_indices_concise}")
```



The list is: [10, 20, 30, 40, 5]
The sum of elements at even indices is: 60
Concise code result: 250

```
[ ]     ments(arr):  
        0, 30, 40, 50]  
    rray_elements(my_array)  
        is: {my_array}")  
    f elements is: {total_sum}")
```

▼
ay is: [10, 20, 30, 40, 50]
of elements is: 150

```
[ ]  
        , 40, 50, 60, 70, 80, 90, 100  
  
(numbers), 2):  
+= numbers[i]  
{numbers}")  
ements at even index position:  
ise = sum(numbers[i] for i in  
result: {sum_even_indices_con
```

▼
20, 30, 40, 50, 60, 70, 80
ts at even index positions
lt: 250

```
[ ]         sum_even_indices += number
print(f"The list is: {numbers}")
print(f"The sum of elements at even indices is: {sum_even_indices}")
sum_even_indices_concise = sum(numbers[::2])
print(f"Concise code result: {sum_even_indices_concise}")
```

▼
The list is: [10, 20, 30, 40]
The sum of elements at even indices is: 70
Concise code result: 250



[1]
✓ 1s



```
def find_largest_iterative(numbers):
    if not numbers:
        return None

    largest = numbers[0]

    for number in numbers[1:]:
        if number > largest:
            largest = number

    return largest
```

```
my_list = [10, 4, 78, 23, 50]
largest_number = find_largest_iterative(my_list)
print(f"The list is: {my_list}")
print(f"The largest number is: {largest_number}")
```

▼
... The list is: [10, 4, 78, 23, 50]
The largest number is: 78

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✓ RAM []
Disk []

```
[ ]     sum_even_indices += numb
print(f"The list is: {number}
print(f"The sum of elements
sum_even_indices_concise = s
print(f"Concise code result:
```

The list is: [10, 20, 30, 40]
The sum of elements at even indices: 60
Concise code result: 250



[1] ✓ 1s



erative(numbers):

```
    ns[0]
```

```
    numbers[1:]:
        largest:
            = number
```

```
3, 23, 50, 9]
nd_largest_iterative(my_list)
: {my_list}"))
number is: {largest_number}"
```

... is: [10, 4, 78, 23, 50, 9]
est number is: 78

[2]

✓ 0s



```
def find_smallest_min(numbers
    """
        Finds the smallest number
    """
    if not numbers:
        return None # Handle empty list
    smallest = min(numbers)
    return smallest
```

```
my_list = [5, 2, 8, 1, 9]
smallest_num = find_smallest_min(my_list)
print(f"The list is: {my_list}")
print(f"The smallest number is: {smallest_num}")
```



... The list is: [5, 2, 8, 1, 9]
The smallest number is: 1

The list is: [5, 2, 8, 1, 9]
The smallest number is: 1



[3]
✓ 1s



```
# Function to count even and  
def count_even_odd(numbers):
```

```
    even_count = 0
```

```
    odd_count = 0
```

```
    for num in numbers:
```

```
        if num % 2 == 0:
```

```
            even_count += 1
```

```
        else:
```

```
            odd_count += 1
```

```
    return even_count, odd_c
```

```
my_array = [1, 2, 3, 4, 5, 6]
```

```
even_total, odd_total = coun
```

```
print(f"The array is: {my_ar
```

```
print(f"Number of even numbers: {even_t
```

```
print(f"Number of odd numbers: {odd_t
```

... The array is: [1, 2, 3, 4,
Number of even numbers: 5
Number of odd numbers: 5

The list is: [5, 2, 8, 1, 9]
The smallest number is: 1

[3]
✓ 1s

even and odd numbers in a list
numbers):

s:

0:

t += 1

+= 1

, odd_count

4, 5, 6, 7, 8, 9, 10]

= count_even_odd(my_array)

{my_array}"

n numbers: {even_total}"

numbers: {odd_total}"



... 2, 3, 4, 5, 6, 7, 8, 9, 10]
bers: 5
ers: 5