



PYTHON PROGRAMS

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- ❖ CLASS/SEC – X C
- ❖ ROLL NUMBER - 24

SET : 1

S No.	Program
1.	Mini Calculator
2.	Calculate area and perimeter of square and rectangle
3.	Calculating circumference and area of a circle
4.	Temperature conversion- Celsius to Fahrenheit and vice versa
5.	Check whether the number entered is odd or even
6.	Find the greater of two numbers
7.	Checking whether the person is eligible to vote or not
8.	Accepting marks and displaying 'pass' if total marks are more than 120 otherwise 'practice more' message should be displayed.
9.	Calculating simple interest
10.	Find the greatest of three numbers

PROGRAM 1 : MINI CALCULATOR

Python Code

```
print("enter your numbers")
a = int(input())
b = int(input())
p = a*b
s = a+b
d = a-b
q = a/b
print("sum is",s)
print("difference is",d)
print("product is",p)
print("quotient is",q)
```

Output

```
enter your numbers
2
301
sum is 303
difference is -299
product is 602
quotient is 0.006644518272425249
>>>
```

PROGRAM 2 : CALCULATE AREA AND PERIMETER OF SQUARE AND RECTANGLE

Python Code

```
print("enter the length of the side of rectangle")
a = float(input())
b = float(input())
p = 2*(a+b)
c = a*b
print("perimeter is" , p)
print("area is" , c)

print("enter the length of the side of square")
d = float(input())
e = d*d
f = 4*d
print("perimeter is" , f)
print("area is" , e)
|
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p2.py =
enter the length of the side of rectangle
25.5
40.9
perimeter is 132.8
area is 1042.95
enter the length of the side of square
222
perimeter is 888.0
area is 49284.0
>>> |
```

PROGRAM 3 : CALCULATING CIRCUMFERENCE AND AREA OF A CIRCLE

Python Code

```
print("enter the length of radius of the circle")
r = float(input())
c = 2*(22/7)*r
a = (22/7)*r*r
print("cicumference is" , c)
print("area is" , a)
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p2.py ==
enter the length of radius of the circle
2.3
cicumference is 14.457142857142856
area is 16.62571428571428
```

PROGRAM 4: TEMPERATURE CONVERSION- CELSIUS TO FAHRENHEIT AND VICE VERSA

Python Code

```
print("Do you want to convert from celsius to fahrenheit or vice-versa ? If you want to convert from celsius to fahrenheit then enter 1 else enter 2")
option = int(input())
if(option == 1):
    print("enter temperature")
    a = float(input())
    f = (a*(9/5))+32
    print("temperature in fahrenheit is" , f)
else :
    print("enter temperature")
    b = float(input())
    c = ((b-32)*(5/9))
    print("temperature in celcius is" , c)
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p2.py =
Do you want to convert from celsius to fahrenheit or vice-versa ? If you want to
convert from celsius to fahrenheit then enter 1 else enter 2
1
enter temperature
30
temperature in fahrenheit is 86.0
>>>
```

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p2.py =
Do you want to convert from celsius to fahrenheit or vice-versa ? If you want to
convert from celsius to fahrenheit then enter 1 else enter 2
2
enter temperature
55
temperature in celcius is 12.777777777777779
>>>
```

PROGRAM 5: CHECK WHETHER THE NUMBER ENTERED IS ODD OR EVEN

Python Code

```
print("enter your number")
a = int(input())
if (a%2) == 1:
    print("number is odd")
else:
    print("number is even")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\shalabh verma\OneDrive\Desktop\Riya AI project file\p2.py =
enter your number
6
number is even
>>>
== RESTART: C:\Users\shalabh verma\OneDrive\Desktop\Riya AI project file\p2.py =
enter your number
79
number is odd
>>> |
```

PROGRAM 6: FIND THE GREATER OF TWO NUMBERS

Python Code

```
print("enter your numbers")
a = float(input())
b = float(input())
if(a>b):
    print(a , "is greater")
else:
    print(b , "is greater")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
60.9
7.09
60.9 is greater
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
5.987
5.897
5.987 is greater
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
4.09
4.1
4.1 is greater
>>>
```


PROGRAM 7 : CHECKING WHETHER THE PERSON IS ELIGIBLE TO VOTE OR NOT

Python Code

```
print("enter your age")
a = int(input())
if(a >= 18):
    print("eligible to vote")
else :
    print("not eligible to vote")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your age
15
not eligible to vote
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your age
18
eligible to vote
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your age
21
eligible to vote
>>> |
```

PROGRAM 8 : ACCEPTING MARKS AND DISPLAYING 'PASS' IF TOTAL MARKS ARE MORE THAN 120 OTHERWISE 'PRACTICE MORE' MESSAGE SHOULD BE DISPLAYED.

Python Code

```
print("enter your marks in english, hindi, maths and science")
a = float(input())
b = float(input())
c = float(input())
d = float(input())
s = a + b + c + d
if(s > 120):
    print("pass")
else :
    print("practice more")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your marks in english, hindi, maths and science
45.5
35.5
40
35
pass
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your marks in english, hindi, maths and science
25.5
24.5
25
25
practice more
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your marks in english, hindi, maths and science
40
40
20
20
practice more
>>> |
```

PROGRAM 9 : CALCULATING SIMPLE INTEREST

Python Code

```
print("enter the principle that you gave")
p = int(input())
print("enter the value of rate of interest per annum")
r = int(input())
print("enter the time period")
t = int(input())
s = (p*r*t)/100
print("your interest is", s)
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter the principle that you gave
12000
enter the value of rate of interest per annum
6
enter the time period
5
your interest is 3600.0
>>> |
```

PROGRAM 10 : FIND THE GREATEST OF THREE NUMBERS

Python Code

```
print("enter your numbers")
a = float(input())
b = float(input())
c = float(input())

if(a > b and a > c):
    print(a, "is the greatest")
elif(b > c and b > a):
    print(b, "is the greatest")
elif(b == c and c == a) :
    print("all numbers are equal")
else :
    print(c,"is the greatest")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
56.7
23.9
12.0
56.7 is the greatest
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
34.4
34.5
34.3
34.5 is the greatest
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
23
22
25
25.0 is the greatest
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p3.py =
enter your numbers
12
12
12
all numbers are equal
>>>
```

SET : 2

S no.	Program
1.	Swap the values stored in two variables
2.	Temperature conversion- Celsius to Fahrenheit and vice versa
3.	Check whether a quadrilateral is square or rectangle
4.	Check whether a number is positive, negative or zero
5.	Ask user to enter marks of five subjects out of 40 each. Calculate percentage and print grades
6.	Print first n even numbers
7.	Print 'n' multiples of 'm'
8.	Ask user to enter 'n' numbers and then check all the numbers to be odd or even
9.	Print square 'n' numbers
10.	Print the series – $1/1$, $2/4$, $3/9$,..... N/n^2
11.	Print sum of first 'n' even numbers
12.	Generate Fibonacci series
13.	Sum of square of first 'n' numbers
14.	Check whether a number is prime or composite
15.	Generate a series in reverse order from n to 1

PROGRAM 1: SWAP THE VALUES STORED IN TWO VARIABLES

Python Code

```
print("enter your first number")
a = int(input())
print("enter your second number")
b = int(input())
c = a + b
a = c - a
b = c - b
print("so the first number is", a)
print("and the second number is", b)
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter your first number
23
enter your second number
34
so the first number is 34
and the second number is 23
>>> |
```

PROGRAM 2: TEMPERATURE CONVERSION- CELSIUS TO FAHRENHEIT AND VICE VERSA

Python Code

```
print("Do you want to convert from celsius to fahrenheit or vice-versa ? If you want to convert from celsius to fahrenheit then enter 1 else enter 2")
option = int(input())
if(option == 1):
    print("enter temperature")
    a = float(input())
    f = (a*(9/5))+32
    print("temperature in fahrenheit is" , f)
else :
    print("enter temperature")
    b = float(input())
    c = ((b-32)*(5/9))
    print("temperature in celcius is" , c)
```

Output

```

C:\Users\shalabh verma\OneDrive\Desktop\Riya AI project file>python p5.py
Do you want to convert from celsius to fahrenheit or vice-versa ? If you want to
convert from celsius to fahrenheit then enter 1 else enter 2
2
enter temperature
89
temperature in celcius is 31.666666666666668
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p5.py ==
Do you want to convert from celsius to fahrenheit or vice-versa ? If you want to
convert from celsius to fahrenheit then enter 1 else enter 2
1
enter temperature
34
temperature in fahrenheit is 93.2
>>> |
```

PROGRAM 3: CHECK WHETHER A QUADRILATERAL IS SQUARE OR RECTANGLE

Python Code

```
print("are all the angles of the quadrilateral 90 degree ? if yes enter 1 else enter 2")
option = int(input())
if(option == 1):
    print("enter the length of 2 adjacent sides of the quadrilateral")
    a = int(input())
    b = int(input())
    if(a == b):
        print("the quadrilateral is a square")
    else:
        print("the quadrilateral is a rectangle")
else :
    print("its neither a rectangle nor a square")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
are all the angles of the quadrilateral 90 degree ? if yes enter 1 else enter 2
2
its neither a rectangle nor a square
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
are all the angles of the quadrilateral 90 degree ? if yes enter 1 else enter 2
1
enter the length of 2 adjacent sides of the quadrilateral
12
12
the quadrilateral is a square
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
are all the angles of the quadrilateral 90 degree ? if yes enter 1 else enter 2
1
enter the length of 2 adjacent sides of the quadrilateral
34
9
the quadrilateral is a rectangle
...
```


PROGRAM 4: CHECK WHETHER A NUMBER IS POSITIVE, NEGATIVE OR ZERO

Python Code

```
print("enter your number")
a = int(input())
if(a > 0):
    print("the number is positive")
elif(a < 0):
    print("the number is negative")
else:
    print("the number is zero")
```

Output

```
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter your number
-21
the number is negative
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter your number
34
the number is positive
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter your number
0
the number is zero
>>>
\\>>> I
```

PROGRAM 5: ASK USER TO ENTER MARKS OF FIVE SUBJECTS OUT OF 40 EACH. CALCULATE PERCENTAGE AND PRINT GRADES

CRITERION :

- >90 : A1
- 81 – 90 : A2
- 71 – 80 : B1
- 61 – 70 : B2
- 51 – 60 : C
- <50 : D

Python Code

```
print("enter you marks in 1 rst subject")
a = float(input())
print("enter you marks in 2 nd subject")
b = float(input())
print("enter you marks in 3 rd subject")
c = float(input())
print("enter you marks in 4 rth subject")
d = float(input())
print("enter you marks in 5 th subject")
e = float(input())
p = ((a + b + c + d + e)/(40*5))*100
print("your percentage is",p ,"%")
if(p > 90):
    print("your grade is A1")
elif(81 <= p <= 90):
    print("your grade is A2")
elif(71 <= p <= 80):
    print("your grade is B1")
elif(61 <= p <= 70):
    print("your grade is B2")
elif(51 <= p <= 60):
    print("your grade is C")
else:
    print("your grade is D")
```

Output

```
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter you marks in 1 rst subject
34
enter you marks in 2 nd subject
40
enter you marks in 3 rd subject
39
enter you marks in 4 rth subject
32
enter you marks in 5 th subject
37
your percentage is 91.0 %
your grade is A1
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter you marks in 1 rst subject
31
enter you marks in 2 nd subject
30
enter you marks in 3 rd subject
39
enter you marks in 4 rth subject
32
enter you marks in 5 th subject
37
your percentage is 84.5 %
your grade is A2
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter you marks in 1 rst subject
31
enter you marks in 2 nd subject
30
enter you marks in 3 rd subject
29
enter you marks in 4 rth subject
32
enter you marks in 5 th subject
37
your percentage is 79.5 %
your grade is B1
```

```
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter you marks in 1 rst subject
31
enter you marks in 2 nd subject
20
enter you marks in 3 rd subject
29
enter you marks in 4 rth subject
29
enter you marks in 5 th subject
30
your percentage is 69.5 %
your grade is B2
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter you marks in 1 rst subject
20
enter you marks in 2 nd subject
20
enter you marks in 3 rd subject
26
enter you marks in 4 rth subject
27
enter you marks in 5 th subject
25
your percentage is 59.0 %
your grade is C
>>>
= RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p 4.py =
enter you marks in 1 rst subject
20
enter you marks in 2 nd subject
20
enter you marks in 3 rd subject
26
enter you marks in 4 rth subject
17
enter you marks in 5 th subject
15
your percentage is 49.0 %
your grade is D
```

PROGRAM 6: PRINT FIRST n EVEN NUMBERS

Python Code

```
print("enter the last number")
a = int(input())
for i in range(0 , a + 1, 2):
    print(i)
```

Note : Used variable 'a' to accept the 'n'

Output

```
enter the last number
40
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
```

PROGRAM 7: PRINT 'n' MULTIPLES OF 'm'

Python Code

```
print("enter the number whose multiples you require")
m = int(input())
print("enter the last term")
n = int(input())
for i in range(1,n+1):
    p = i*m
    print(m , "*", i, "=", p)
```

Output

```
enter the number whose multiples you require
23
enter the last term
10
23 * 1 = 23
23 * 2 = 46
23 * 3 = 69
23 * 4 = 92
23 * 5 = 115
23 * 6 = 138
23 * 7 = 161
23 * 8 = 184
23 * 9 = 207
23 * 10 = 230
```

PROGRAM 8: ASK USER TO ENTER 'n' NUMBERS AND THEN CHECK ALL THE NUMBERS TO BE ODD OR EVEN

Python Code

```
print("enter the last term")
a = int(input())
for i in range(1, a+1):
    if(i%2 == 0):
        print(i,"is even")
    else:
        print(i,"is odd")
```

Note : Used variable 'a' to accept the 'n'

Output

```
enter the last term
12
1 is odd
2 is even
3 is odd
4 is even
5 is odd
6 is even
7 is odd
8 is even
9 is odd
10 is even
11 is odd
12 is even
>>>
```

PROGRAM 9: PRINT SQUARE 'n' NUMBERS

Python Code

```
print("enter the last term")
a = int(input())
for i in range(1, a+1):
    b = i*i
    print(i, "*", i, "is", b)
```

Note : used variable 'a' to accept the 'n'

Output

```
enter the last term
21
1 * 1 is 1
2 * 2 is 4
3 * 3 is 9
4 * 4 is 16
5 * 5 is 25
6 * 6 is 36
7 * 7 is 49
8 * 8 is 64
9 * 9 is 81
10 * 10 is 100
11 * 11 is 121
12 * 12 is 144
13 * 13 is 169
14 * 14 is 196
15 * 15 is 225
16 * 16 is 256
17 * 17 is 289
18 * 18 is 324
19 * 19 is 361
20 * 20 is 400
21 * 21 is 441
```

PROGRAM 10: PRINT THE SERIES – $1/1$, $2/4$, $3/9$, n/n^2

Python Code

```
print("enter the last term")
a = int(input())
print("the series is")
for i in range(1, a+1):
    p = i*i
    print(i, "/", p)
```

Note : Used variable 'a' to accept the 'n'

Output

```
enter the last term
12
the series is
1 / 1
2 / 4
3 / 9
4 / 16
5 / 25
6 / 36
7 / 49
8 / 64
9 / 81
10 / 100
11 / 121
12 / 144
```

PROGRAM 11: PRINT SUM OF FIRST 'n' EVEN NUMBERS

Python Code

```
print("enter the last term")
n = int(input())
s = 0
for i in range(0, n+1):
    s = s + 2*i
print("sum till", i, "term is :", s)
```

Output

```
enter the last term
12
sum till 12 term is : 156
```


PROGRAM 12: GENERATE FIBONACCI SERIES

Python Code

```
print("enter the last term")
n = int(input())
print("enter first two numbers")
a = int(input())
b = int(input())
print("1 number is",a)
for i in range(2,n+1):
    c = a + b
    print(i, " number is", c)
    a = b
    b = c
```

Output

```
enter the last term
21
enter first two numbers
0
1
1 number is 0
2 number is 1
3 number is 2
4 number is 3
5 number is 5
6 number is 8
7 number is 13
8 number is 21
9 number is 34
10 number is 55
11 number is 89
12 number is 144
13 number is 233
14 number is 377
15 number is 610
16 number is 987
17 number is 1597
18 number is 2584
19 number is 4181
20 number is 6765
21 number is 10946
```

PROGRAM 13: SUM OF SQUARE OF FIRST 'n' NUMBERS

Python Code

```
print("enter the number of terms")
a = int(input())
s = 0
for i in range(1 , a+1):
    s = s + i*i
print("the sum of squares of numbers till",a, "term is :", s)
```

Output

```
-----
enter the number of terms
10
the sum of squares of numbers till 10 term is : 385
>>> .
```

Note : Used variable 'a' to accept the 'n'

PROGRAM 14: CHECK WHETHER A NUMBER IS PRIME OR COMPOSITE

Python Code

```
print("enter you number which you want to check if it is prime or composite")
a = int(input())
flag = 0
if(a == 1):
    print("neither prime nor composite")
else:
    for i in range(2, a):
        if(a%i == 0):
            print("number is composite")
            flag = 1
            break
    if (flag == 0) :
        print("number is prime")
```

Output

```
...
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p4.py =
enter you number which you want to check if it is prime or composite
14
number is composite
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p4.py =
enter you number which you want to check if it is prime or composite
101
number is prime
>>>
== RESTART: C:/Users/shalabh verma/OneDrive/Desktop/Riya AI project file/p4.py =
enter you number which you want to check if it is prime or composite
1
neither prime nor composite
>>>
```

PROGRAM 15: GENERATE A SERIES IN REVERSE ORDER FROM n TO 1

Python Code

```
print("enter your last number")
n = int(input())
print("the reverse order is:")
for i in range(n,0,(-1)):
    print(i)
```

Output

```
enter your last number
13
the reverse order is:
13
12
11
10
9
8
7
6
5
4
3
2
1
```