```
starting and ending number.py ×
                                                                                                                                           \triangleright \wedge \square \cdots
Users > avipatel > 📌 starting and ending number.py > ...
       start = int(input("enter the start of range:"))
       end = int(input("enter the end of range:"))
  3
       for num in range(start,end+1):
           if num % 2 == 0:
                print(num,end = " ")
                                                                                                                  \triangleright Python - avipatel + \vee \square
PROBLEMS
             OUTPUT
                       DEBUG CONSOLE
                                                     JUPYTER
                                         TERMINAL
 /usr/local/bin/python3 "/Users/avipatel/starting and ending number.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/starting and ending number.py"
 enter the start of range:10
 enter the end of range:30
10 12 14 16 18 20 22 24 26 28 30 🖁
```

avipatel@Avis—MBP ~ % ■

```
greatest number.py
Users > avipatel > • greatest number.py > ...
        num1 = int(input("enter first number:"))
       num2 = int(input("enter second number:"))
   3
       if num1 >=num2:
   5
            if num1 == num2:
             print("both number are equal.")
  6
            else:
                print("first number is greater than the second number.")
  8
  9
        else:
                       print("second number is greater than the first number.")
 10
                                                                                                 \triangleright Python - avipatel + \vee \square \stackrel{.}{\square} \wedge \times
 PROBLEMS
                                                       JUPYTER
             OUTPUT
                        DEBUG CONSOLE
                                           TERMINAL
 /usr/local/bin/python3 "/Users/avipatel/greatest number.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/greatest number.py"
enter first number:30
```

enter second number:80

enter first number:10 enter second number:10 both number are equal. avipatel@Avis-MBP ~ % □

second number is greater than the first number.

avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/greatest number.py"

```
factorial number.py ×
Users > avipatel > ♦ factorial number.py > ...
       num =int(input("enter a number: "))
  2
       fac =1
       for i in range(1,num+1):
           fac=fac*i
  6
           print("factorial of",num,"is",fac)
                                                                                Python - avipatel + ∨ □ · · · ×
PROBLEMS
             OUTPUT
                       DEBUG CONSOLE
                                        TERMINAL
                                                   JUPYTER
 /usr/local/bin/python3 "/Users/avipatel/factorial number.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/factorial number.py"
 enter a number: 5
 factorial of 5 is 1
 factorial of 5 is 2
 factorial of 5 is 6
 factorial of 5 is 24
 factorial of 5 is 120
```

avipatel@Avis-MBP ~ % ∏

```
swap 2 number using third variable.py ×
Users > avipatel > ♥ swap 2 number using third variable.py > ...
      a = int(input("please give first number a:"))
       b = int(input("please give second number b:"))
  3
       tempvar=a
  4
       a=b
  5
       b=tempvar
       print("after swapping")
  6
       print("value of a is:",a);
  8
       print("value of b is:",b);
                                                                            PROBLEMS
            OUTPUT
                     DEBUG CONSOLE
                                      TERMINAL
                                                 JUPYTER
/usr/local/bin/python3 "/Users/avipatel/swap 2 number using third variable.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/swap 2 number using t
hird variable.py"
please give first number a:25
please give second number b:30
after swapping
value of a is: 30
value of b is: 25
avipatel@Avis-MBP ~ % ■
```

```
smallest number.py ×
Users > avipatel > ♥ smallest number.py > ...
      a = int(input("enter first number:"))
      b= int(input("enter second number:"))
  3
      if a<b:
          print("smallest one is:",a)
      elif a>b:
          print("smallest one is:",b)
  6
                                                                                  PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                    TERMINAL
                                              JUPYTER
/usr/local/bin/python3 "/Users/avipatel/smallest number.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipa
tel/smallest number.py"
enter first number:30
```

enter second number:5
smallest one is: 5

avipatel@Avis—MBP ~ % []

```
\triangleright \wedge \square \cdots
calculate area of rectangle.py
Users > avipatel > 🕏 calculate area of rectangle.py > ...
       w = float(input('enter the width of a rectangle :'))
       h = float(input('enter the width of a rectangle :'))
       Area = w*h
  3
  4
       print("Area of Rectangle is: % 2f" %Area)
                                                                                         TERMINAL
                                                  JUPYTER
```

/usr/local/bin/python3 "/Users/avipatel/calculate area of rectangle.py" avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/calculate area of rectangle.py" enter the width of a rectangle :10 enter the width of a rectangle :12 Area of Rectangle is: 120.000000 avipatel@Avis—MBP ~ % ∏

**PROBLEMS** 

OUTPUT

DEBUG CONSOLE



**PROBLEMS** 

OUTPUT

**DEBUG CONSOLE** 

TERMINAL **JUPYTER**  Python - avipatel + ∨ □ □ へ ×







/usr/local/bin/python3 "/Users/avipatel/calculate area of square.py" avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/calculate area of square.py" Area of the square=36 avipatel@Avis-MBP ~ %

```
D ~ III ...
calculate average of 5 number.py ×
Users > avipatel > decalculate average of 5 number.py > ...
       a = int(input("enter first no"))
       b = int(input("enter first no"))
       c = int(input("enter first no"))
  3
       d = int(input("enter first no"))
       e = int(input("enter first no"))
       add = a+b+c+d+e
       print("addition is ",add)
       average = add /5
  8
  9
       print("average =",average)
                                                                                             Python - avipatel + ∨ □ · · · ×
PROBLEMS
            OUTPUT
                      DEBUG CONSOLE
                                       TERMINAL
                                                   JUPYTER
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/calculate average of 5 number.py"
enter first no10
enter first no20
enter first no30
enter first no40
enter first no50
addition is 150
average = 30.0
avipatel@Avis-MBP ~ %
```



PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** JUPYTER

/usr/local/bin/python3 "/Users/avipatel/calculate area of circle.py" avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/calculate area of circle.py" Enter the radius of a circle:10 Area of circle = 314.00 avipatel@Avis-MBP ~ % ■

```
▷ ∨ □ ····
odd or even.py X
Users > avipatel > ♥ odd or even.py > ...
       x =int(input("enter the number :"))
  2
       if(x%2==0):
           print(x,"is an even number")
       else:
           print(x,"is an odd number")
  6
                                                                                     Python - avipatel + ∨ □ □ ^ ×
                                                  JUPYTER
                      DEBUG CONSOLE
                                       TERMINAL
```

```
/usr/local/bin/python3 "/Users/avipatel/odd or even.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/odd or e
ven.py"
enter the number :7
7 is an odd number
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/odd or e
ven.py"
enter the number :8
8 is an even number
avipatel@Avis—MBP ~ % ∏
```

**PROBLEMS** 

OUTPUT

```
\triangleright \wedge \square \cdots
square less than 10.py
Users > avipatel > ♥ square less than 10.py > ...
       n=1
       while n<=10:
  2
  3
           print("square of ",n,"is", n*n)
           n=n+1
  5
  6

    Python - avipatel + ∨ □ □ ^ ×
             OUTPUT
                       DEBUG CONSOLE
                                         TERMINAL
                                                    JUPYTER
PROBLEMS
/usr/local/bin/python3 "/Users/avipatel/square less than 10.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/square less than 10.py"
square of 1 is 1
square of 2 is 4
square of 3 is 9
square of 4 is 16
square of 5 is 25
square of 6 is 36
square of 7 is 49
square of 8 is 64
square of 9 is 81
square of 10 is 100
avipatel@Avis-MBP ~ %
```

```
\triangleright \vee \square \cdots
leap year or not.py ×
Users > avipatel > ♥ leap year or not.py > ...
       year =int(input("enter year:"))
  2
  3
       if year % 4 == 0 and year % 100 != 0:
            print(year,"is a leap year")
        elif year % 100 == 0:
  6
                print(year,"is not a leap year")
        elif year % 400 == 0:
  8
                     print(year,"is a leap year")
  9
       else:
 10
            print(year,"is not a leap year")
 11
                                                                                                     \nearrow Python - avipatel + \vee \square \square \wedge \times
                                          TERMINAL
PROBLEMS
             OUTPUT
                        DEBUG CONSOLE
                                                       JUPYTER
/usr/local/bin/python3 "/Users/avipatel/leap year or not.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/leap year or not.py"
enter year: 2004
2004 is a leap year
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/leap year or not.py"
enter year:2019
```

2019 is not a leap year avipatel@Avis—MBP ~ % ∏

```
\triangleright \wedge \square \cdots
nested if else statement.py ×
Users > avipatel > • nested if else statement.py > ...
       num = input("enter a number")
       num = int(num)
  2
       if num>=0:
  3
           if num>0:
               print("number is positive")
  6
           else:
            print("number is zero")
  8
       else:
            print("number is negative")
  9
                                                                                       DEBUG CONSOLE
PROBLEMS
            OUTPUT
                                       TERMINAL
                                                   JUPYTER
/usr/local/bin/python3 "/Users/avipatel/nested if else statement.py"
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/nested if else statement.py"
enter a number50
number is positive
avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/nested if else statement.py"
enter a number-145
```

avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/nested if else statement.py"

number is negative

avipatel@Avis-MBP ~ %

enter a number0
number is zero

```
\triangleright \wedge \square \cdots
zero,positive or negative.py ×
Users > avipatel > ♥ zero, positive or negative.py > ...
       num = float(input("Enter a number :"))
  2
       if num >= 0:
           if num == 0:
               print("zero")
   5
           else:
               print("positive number")
   6
       else:
             print("negative number")
  8
  9
                                                                                        OUTPUT
                                                   JUPYTER
PROBLEMS
                       DEBUG CONSOLE
                                        TERMINAL
```

```
/usr/local/bin/python3 "/Users/avipatel/zero,positive or negative.py" avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/zero,positive or negative.py" Enter a number :0 zero avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/zero,positive or negative.py" Enter a number :10 positive number avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/zero,positive or negative.py" Enter a number :-20 negative number avipatel@Avis-MBP ~ %
```

```
without taking third variable.py
                                                                                                                                                  \triangleright \wedge \square \cdots
Users > avipatel > ♥ without taking third variable.py > ...
        x = 5
        v = 7
        print("before swapping:")
        print("value of x:",x,"and y:",y)
   6
        x,y = y,x
        print("after swapping:")
        print("value of x:",x,"and y:",y)
  10
```

/usr/local/bin/python3 "/Users/avipatel/without taking third variable.py" avipatel@Avis-MBP ~ % /usr/local/bin/python3 "/Users/avipatel/without taking third variable.py" before swapping: value of x: 5 and y: 7 after swapping: value of x: 7 and y: 5 avipatel@Avis-MBP ~ %

**JUPYTER** 

TERMINAL

**PROBLEMS** 

OUTPUT

**DEBUG CONSOLE**