```
#LAB 5 Question 1

i = int(input('Please enter the first number: '))
j = int(input('Please enter the second number: '))

if i < j:

    difference = j - i

    if difference >= 2:  #"not difference < 2" is also ok

        for x in range(i+1, j):
            # "end" parameter in print() changes how your string in print() ends.
            # By default it represents a newline but we want to print side by side.
            # Therefore, writing end=" " prints a space (" ") in between instead of newline.
            print(x, end=" ")
    else:
        print('Exiting...')
        exit(0)

else:

    difference = i - j

    if difference >= 2:  #"not difference < 2" is also ok

        for x in range(j + 1, i):
            # "end" parameter in print() changes how your string in print() ends.
            # By default it represents a newline but we want to print side by side.
            # Therefore, writing end=" " prints a space (" ") in between instead of newline.
            print(x, end=" "),
    else:
        print('Exiting...')
        exit(0)

print() #for good looks only not important to answers

#LAB 5 Question 2

while True:
    temp = int(input('Please enter the temperature: '))

    if temp == -1000:
        print('Exiting the program...')
        break
    elif 10 <= temp <= 30:  # "10 <= temp and temp <= 30" is also ok
        print('It is a pleasant day...')
    elif temp > 30:
        print('It is hot!!')
    else:
        print('It is a cold day.')


#LAB 5 TO-DO @ Home

number = int(input('Please enter a number: '))
flag = True

if number < 2:
    flag = False  # not prime
elif number == 2:
    flag = True  # prime
else:
    for i in range(2, number):
        if (number % i) == 0:
            flag = False  # not prime
            break

if flag:
    print(number, "is a prime number")
else:
    print(number, "is not a prime number")
```