

```

s = input('please enter data : ')
print('+ve indexes:')
for i in range(len(s)):
    print(s[i],end='')
print()
for i in range(len(s)-1,-1,-1):
    print(s[i],end='')
print()
print('-ve indexes : ')
for i in range(-len(s),0):
    print(s[i],end='')
print()
for i in range(-1,-len(s)-1,-1):
    print(s[i],end='')

```

```

please enter data : nagasai
+ve indexes:
nagasai
iasagan
-ve indexes :
nagasai
iasagan

```

▼ write a program for prime number

```

num = 317
count = 0
for i in range(2,num):
    if num % i == 0:
        count = count + 1
else:
    if count == 0:
        print(num,'is a prime number')
    else:
        print(num,'is not a prime number')

```

```

317 is a prime number

```

```

for i in range(1,6):
    if i == 6:
        break
    print(i,end=' ')
else:
    print('Thank you')

```

```

1 2 3 4 5 Thank you

```

```

for i in range(1,6):
    if i == 5:
        break
    print(i,end=' ')

```

```

else:
    print('Thank you')

for i in range(1,6):
    break
    print(i,end=' ')
else:
    print('Thank you')

num = input('Please enter a number : ')
if num.isdigit() == True:
    num = int(num)
    if num > 1:
        count = 0
        for i in range(2,num):
            if num % i == 0:
                count = count + 1
            else:
                if count == 0:
                    print(num,'is a prime number')
                else:
                    print(num,'is not a prime number')
        else:
            print('not a valid number')
    else:
        print('Invalid input data')

```

```

Please enter a number : 12.42
Invalid input data

```

```

num = input('Please enter a number : ')
if num.isdigit() == True:
    num = int(num)
    if num > 1:
        count = 0
        for i in range(2,num):
            print('loop count : ',i-1)
            if num % i == 0:
                count = count + 1
            else:
                if count == 0:
                    print(num,'is a prime number')
                else:
                    print(num,'is not a prime number')
        else:
            print('not a valid number')
    else:
        print('Invalid input data')

```

```

Please enter a number : 50
loop count : 1
loop count : 2
loop count : 3
loop count : 4
loop count : 5
loop count : 6
loop count : 7
loop count : 8
loop count : 9
loop count : 10
loop count : 11
loop count : 12
loop count : 13
loop count : 14
loop count : 15
loop count : 16
loop count : 17
loop count : 18
loop count : 19
loop count : 20
loop count : 21
loop count : 22
loop count : 23
loop count : 24
loop count : 25
loop count : 26
loop count : 27
loop count : 28
loop count : 29
loop count : 30
loop count : 31
loop count : 32
loop count : 33
loop count : 34
loop count : 35
loop count : 36
loop count : 37
loop count : 38
loop count : 39
loop count : 40
loop count : 41
loop count : 42
loop count : 43
loop count : 44
loop count : 45
loop count : 46
loop count : 47
loop count : 48
50 is not a prime number

```

▼ optimized code for prime number

```

num = 10000
for i in range(2,num):
    print('loop count : ',i-1)
    if num % i == 0:
        print(num,'is not a prime number')
        break
else:
    print(num,'is a prime number')

loop count : 1
10000 is not a prime number

```

```

s = 'python'
for i in s:
    print(i,end=' ')

p y t h o n

```

```
s = 'python'
for i in s:
    print(i)
```

```
p
y
t
h
o
n
```

```
s = 'python'
for i in range(len(s)): # generate indexes manually
    print(i,s[i])
```

```
0 p
1 y
2 t
3 h
4 o
5 n
```

```
s = 'python'
for i in range(len(s)):
    if i%2 == 0:
        print(s[i])
```

```
p
t
o
```

```
s = 'python'
for i in range(len(s)):
    if i % 2 == 0:
        print(i,s[i])
```

```
0 p
2 t
4 o
```

```
s = 'python'
s1 = ''
for i in s:
    if i not in 'aeiouAEIOU':
        s1 = s1 + i
else:
    print(s1)
```

```
pythn
```

```
s = 'srinath'
consonents = ''
vowels = ''
for i in s:
    if i in 'aeiouAEIOU':
        vowels = vowels + i
    else:
        consonents = consonents + i
```

```

else:
    print('consonents :',consonents)
    print('vowels :',vowels)
    consonents : srnth
    vowels : ia

```

```

s = 'good afternoon'
consonents = ''
vowels = ''
for i in s:
    if i.isalpha() == True:
        if i in 'aeiouAEIOU':
            vowels = vowels + i
        else:
            consonents = consonents + i
else:
    print('consonents :',consonents)
    print('vowels :',vowels)
    consonents : gdftrnn
    vowels : ooaeoo

```

```

s = 'srinath'
s1 = ''
# SrInAtH
for i in range(len(s)):
    if i%2 == 0:
        s1 = s1 + s[i].upper()
    else:
        s1 = s1 + s[i].lower()
else:
    print(s1)
    SrInAtH

```

```

'''
s
rr
iii
nnnn
aaaaa
tttttt
hhhhhhh
'''

```

```

s = 'srinath'
for i in range(len(s)):
    print(s[i]*(i+1))
    s
    rr
    iii
    nnnn
    aaaaa
    tttttt
    hhhhhh

```

```
s = 'srinath'
'''
```

```
srinath
srinath
srinath
srinath
srinath
srinath
srinath
'''
```

```
s = 'srinath'
for i in range(len(s)):
    print(' '*i,s)
```

```
srinath
srinath
srinath
srinath
srinath
srinath
srinath
```

```
# write a program to find the sum of vowel indexes
# difference between consonent inxes sum and vowel indexes sum
# write a program to find upper case char count
```

✓ 0s completed at 2:03 PM

