

If

Program	Test case
<p>Question:-</p> <p>1 .Write a program to check whether given value is divisible by 6 or not if divisible by 6 print the cube of that value or else perform the left shift operation step is 3.</p> <p>Solution:-</p> <pre>n=int(input("enter the number :")) if n % 6 == 0: m=n*n*n print(m) else: m=n << 3 print(m)</pre>	<p>1</p> <p>enter the number :10</p> <p>the leftshifted number: 80</p> <p>2</p> <p>enter the number :6</p> <p>the cube of given number 216</p> <p>3</p> <p>enter the number :2.5</p> <p>Traceback (most recent call last):</p> <p>File</p> <p>"C:/Users/admin/AppData/Local/Programs/Python/Python310/p1.py", line 1, in <module></p> <pre>n=int(input("enter the number :"))</pre> <p>ValueError: invalid literal for int() with base 10: '2.5'</p>

Program	Test case
<p>Question:-</p> <p>Write a program check two vales are poiting to the same memory or not if same memory display the address of the two values or else display the type of the values</p> <p>Solution :-</p> <pre>a=eval(input("enter the first value")) b=eval(input("enter the second value")) if a==b: print("id of the value",id(a)) else: print("type of the value",type(a))</pre>	<p>1</p> <p>enter the first value125</p> <p>enter the second value126</p> <p>type of the value <class 'int'></p> <p>2</p> <p>enter the first value135</p> <p>enter the second value135</p> <p>id of the value 2079453483440</p> <p>3</p> <p>enter the first value"hji"</p> <p>enter the second value"hij"</p> <p>type of the value <class 'str'></p>

Program	Test case
<p>Questions :-</p> <p>Write a program to check whether given collection length is even print the reverse order of collection or else print the odd position value inside the collection</p> <p>Solution :-</p> <pre>s=input("enter the character") if len(s)%2==0: print(s[::-1]) else: print(s[1::2])</pre>	<p>1</p> <p>enter the characterhaii</p> <p>iiiah</p> <p>2</p> <p>enter the characterhello</p> <p>el</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is number or not</p> <p>Solution</p> <pre>a=eval(input("enter the number ")) if type(complex(a))==complex or type(float(a))==float or type(int(a))==int: print("number",a)</pre>	<p>1</p> <p>enter the number 10</p> <p>number 10</p> <p>2</p> <p>enter the number a</p> <p>Traceback (most recent call last):</p> <p>File</p> <p>"C:/Users/admin/AppData/Local/Programs/Python/Python310/p11.py", line 1, in <module></p> <p>a=eval(input("enter the number "))</p> <p>File "<string>", line 1, in <module></p> <p>NameError: name 'a' is not defined</p> <p>3</p> <p>enter the number 1+1j</p> <p>number (1+1j)</p> <p>4</p> <p>enter the number 0.1</p> <p>number 0.1</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is number or not</p> <p>Solution</p> <pre>a=10.3 if type(a)==complex or -999999<=a<=999999: print("number ", a)</pre>	<p>number 10.3</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is present in the collection or not</p> <p>Solution</p> <pre>a=int(input("enter the character")) if a in [10, 20, 30,'haii'] : print("given chaacter is presesnt ")</pre>	<p>1</p> <p>enter the character10</p> <p>given chaacter is present</p> <p>2</p> <p>enter the character20</p> <p>given chaacter is presesnt</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is alphabet or not</p> <p>Solution</p> <pre>a=input("enter the character") if 65<=ord(a)<=90 or 97<=ord(a)<=122: print("given character is alphabet",a)</pre>	<p>1</p> <p>enter the character n</p> <p>given character is alphabet n</p> <p>2</p> <p>enter the character h</p> <p>given character is alphabet h</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is character or not</p> <p>Solution</p> <pre>a=input("enter the character") if type(a)==str: print("the given input is charcter")</pre>	<p>1</p> <p>enter the character g</p> <p>the given input is charcter</p> <p>2</p> <p>enter the character 10</p> <p>the given input is charcter</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is uppercase or not</p> <p>Solution</p> <pre>char=input("enter the character") if 'A'<=char<='Z': print("given character is uppercase",char) or char=input("enter the character") if 65<=ord(char)<=90: print("given character is uppercase",char)</pre>	<p>1</p> <p>enter the character M</p> <p>given character is uppercase M</p> <p>2</p> <p>enter the character m</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is lowercase or not</p> <p>Solution</p> <pre>char=input("ënter the character") if 'a'<=char<='z': print("given character is lowerercase",char) or char=input("ënter the character") if 97<=ord(char)<=122: print("given character is lowercase",char)</pre>	<p>1</p> <p>enter the character K</p> <p>2</p> <p>ënter the character l</p> <p>given character is lowercase l</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is ASCII number or not</p> <p>Solution</p> <pre>a=input("ënter the character") if 48<=ord(a)<=57: print("given input is ASCII number",a)</pre>	<p>1</p> <p>enter the character k</p> <p>2</p> <p>enter the character 8</p> <p>given input is ASCII number 8</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is special character or not</p> <p>Solution</p> <pre>a=input("ënter the character") if not (48<=ord(a)<=57 or 65<=ord(a)<=90 or 97<=ord(a)<=122): print("given character is special character",a)</pre>	<p>1</p> <p>ënter the character l</p> <p>2</p> <p>ënter the character*</p> <p>given character is special character*</p>

Program	Test case
<p>Question</p> <p>write a program to check whether the given input is even number or not</p> <p>Solution</p> <pre>a=int(input("ënter the number")) if a%2==0:</pre>	<p>1</p> <p>ënter the number78</p> <p>given number is even78</p> <p>2</p> <p>ënter the number 49</p>

print("given number is even",a)	
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Program	Test case
<p>Question</p> <p>)write a program to check whether the given input is odd number or not</p> <p>Solution</p> <pre>a=int(inp("enter the number")) if a%2!=0: print("given number is odd",a) or a=int(inp("enter the number")) if not a%2==0: print("given number is odd",a)</pre>	<p>1</p> <p>enter the number 78</p> <p>2</p> <p>enter the number 49</p> <p>given number is odd 49</p>

Program	Test case
<p>Question</p> <p>write a program to check the number is greatest or not</p> <p>Solution</p> <pre>a=int(input("enter the number")) b=int(input("enter the number")) if a>b: print("a is greater",a)</pre>	<p>1</p> <p>enter the number10</p> <p>enter the number20</p> <p>2</p> <p>enter the number30</p> <p>enter the number20</p> <p>a is greater 30</p>

Program	Test case
<p>Question</p> <p>write a program to check the number is lesser or not</p> <p>Solution</p> <pre>a=int(input("enter the number")) b=int(input("enter the number")) if a<b: print("a is lesser",a)</pre>	<p>1</p> <p>enter the number 40</p> <p>enter the number 30</p> <p>2</p> <p>enter the number 30</p> <p>enter the number 40</p> <p>a is lesser 30</p>

If elif

Program	Test case
<p>Question :- Write a program to find the smallest of 3 numbers</p> <p>Solution :- a=eval(input("enter a value")) b=eval(input("enter b value")) c=eval(input("enter c value")) if a<b and a<c: print(f"{a} is a smallest value") elif b<c: print(f"{b} is a smallest value") else: print(f"{c} is a smallest value")</p>	<p>1 enter a value10 enter b value20 enter c value30 10 is a smallest value</p> <p>2 enter a value25 enter b value20 enter c value23 20 is a smallest value</p> <p>3 enter a value1.0 enter b value1.05 enter c value0.99 0.99 is a smallest value</p>

Program	Test case
<p>Question :- Write a program to check whether given character is vowel print the ascii value with string format. If that value is number then 5 reputation the value. If value is consonant store the value and ascii value inside the set</p> <p>Solution :- a=input("enter the value") if a in 'aeiouAEIOU': print(str(ord(a))) elif ('A'<=a<='Z' or 'a'<=a<='z') and a not in 'aeiouAEIOU': print({a,ord(a)}) elif '0'<=a<='9': print(a*5) else: print("given character is special symbol")</p>	<p>1 enter the valuea 97</p> <p>2 enter the value10 1010101010</p> <p>3 enter the valuef {'f', 102}</p>

If else

Program	Test case
<p>Question</p> <p>write a program to find out the greates of two number and print the number</p> <p>Solution</p> <pre>m=10 n=20 if m<n: print("n is greater:",n) else: print("m is greater:",m)</pre>	<p>n is greater: 20</p>

Program	Test case
<p>Question</p> <p>write a program to find out the greates of two number and print the number</p> <p>Solution</p> <pre>m=int(input("enter the number")) n=int(input("enter the number")) if m<n: print("n is greater:",n) else: print("m is greater:",m)</pre>	<p>enter the number10</p> <p>enter the number24</p> <p>n is greater: 24</p>

Program	Test case
<p>Question</p> <p>write a program to check whether given character is uppercase then that character is converted to lowercase , if it is a lowercase convert into upper</p> <p>Solution</p> <pre>n=input("enter the character") if 'A'<=n<='Z': print(chr(ord(n)+32)) else: print(chr(ord(n)-32))</pre>	<p>1</p> <p>enter the character K</p> <p>k</p> <p>2</p> <p>enter the character k</p> <p>K</p>

Program	Test case
<p>Question write a program to check whether the given value is present inside the collection or not, if the value is present that value stored in list or else that value stored in a dictionary and value consider as a power of the value</p> <p>Solution <pre>n=input("enter the character") li=[10,20.5,30+2j,'str', (34,),{2:'str'}] m=[] d={} if n in li: m+=[n] print(m) else: d[n]=(n**2) print(d)</pre> </p>	<p>enter the character10 [10] enter the character20 {20: 400} enter the character'str' ['str']</p>

nested if condition

Program	Test case
<p>Question write a pgm to check whether the given value is present inside the collection or not if the value is present replace the value with cube of that value, and if the value is present in even position delete the value and if given value is not present inside the collection and extract end value,start value, if the value is present in odd position extract the values starting from that point to end in reverse order</p> <p>Solution <pre>st=eval(input("enter the value")) li=[10,20.06,30+7j,False,'pys',[10],[199,]),{'hai':10}] if st in li: res=li.index(st) r=li[res]=st**3 print(r) if st in li: if li.index(st)%2==0: del li[li.index(st)] print(li) if st not in li: print(li[-1],li[0]) if st in li: if li.index(st)%2!=0:</pre> </p>	<p>enter the value 10 1000 {'hai': 10} 1000 enter the value20 {'hai': 10} 10 enter the value20.06 8072.216215999999 {'hai': 10} 10 enter the valueFalse 0 [{'hai': 10}, {}, (199,), [10], 'pys', 0]</p>

<pre>r=li[li.index(st):][::-1] print(r)</pre>	
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While loop

Program	Test case
<p>Question :- Write a program to print the series of 20 natural values</p> <p>Solution :- i=1 while i<=20: print(i,end=" ") i=i+1</p>	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Program	Test case
<p>Question :- Write a program to print the series of 20 natural values in reverse order</p> <p>Solution :- i=20 while i>=1: print(i,end=" ") i=i-1</p>	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Program	Test case
<p>Question :- Write a program to print the series of upper case characters</p> <p>Solution :- i=65 while i<=90: print(chr(i),end=" ") i=i+1</p>	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Program	Test case
<p>Question :- Write a program to print the series of upper case characters in reverse</p> <p>Solution :- i=90 while i>=65: print(chr(i),end=" ") i=i-1</p>	<p>ZYXWVUTSRQPONMLKJIHGFEDCB A</p>

Program	Test case
<p>Question Write a program to print the series of even number 0 to 30 in reverse order</p> <p>Solution i=30 while i>=0: if i%2==0: print(i,end=" ") i=i-1</p>	<p>30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0</p>

Program	Test case
<p>Question write a pgm to print the factorial of the given number</p> <p>Solution start=int(input("enter the integer value")) fact=1 while start>=1: fact=fact*start start=start-1 print(fact)</p>	<p>1 enter the integer value4 24 2 enter the integer value10 3628800 3 enter the integer value2 2</p>

Program	Test case
<p>Question</p> <p>write a pgm to split the collection input:- "google.com yahoo.in facebook.edu pyspider.com"</p> <p>output:-['google.com', 'yahoo.in', 'facebook.edu', 'pyspider.com']</p> <p>Solution</p> <pre>st="google.com yahoo.in facebook.edu pyspider.com" s="" li=[] i=0 while i<len(st): if st[i]!=' ': s=s+st[i] else: li+=s s=" " i=i+1 if len(s)!=0: li=li+[s] print(li)</pre>	<p>['google.com', ' yahoo.in', ' facebook.edu', ' pyspider.com']</p>

Program	Test case
<p>Question</p> <p>In reverese order</p> <p>Solution</p> <pre>st="google.com yahoo.in facebook.edu pyspider.com" s="" li=[] i=0 while i<len(st): if st[i]!=' ': s=s+st[i] else: li=[s]+li s=" " i=i+1 if len(s)!=0: li=li+[s] print(li)</pre>	<p>[' facebook.edu', ' yahoo.in', 'google.com', ' pyspider.com']</p>

Program	Test case
<p>Question</p> <p>input:-["google.com", "yahoo.in", "facebook.edu", "pyspider.com"]</p>	<p>[' google', ' yahoo', ' facebook', ' pyspider']</p>

output:-[' google', ' yahoo', ' facebook', ' pyspider'] Solution <pre> st=["google.com","yahoo.in","facebook.edu","pyspider.com"] li=[] i=0 while i<len(st): s=" " j=0 while j<len(st[i]): if st[i][j]!=".": s=s+st[i][j] else: li=li+[s] j=j+1 i=i+1 print(li) </pre>	
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Program	Test case
Question Using break Solution <pre> st=["google.com","yahoo.in","facebook.edu","pyspider.com"] li=[] s="" i=0 while i<len(st): j=0 while j<len(st[i]): if st[i][j]!=".": s=s+st[i][j] else: li=li+[s] s="" break j=j+1 i=i+1 print(li) </pre>	['google', 'yahoo', 'facebook', 'pyspider']

Program	Test case
Question input:-["google.com", "yahoo.in", "facebook.edu", "pyspider.com"] output:- ['com', 'in', 'edu', 'com'] Solution <pre> st=["google.com","yahoo.in","facebook.edu","pyspider.com"] </pre>	['com', 'in', 'edu', 'com']

```

li=[]
s=""
i=0
while i<len(st):
    j=0
    temp=st[i][::-1]
    while j<len(temp):
        if temp[j]!=".":
            s=temp[j]+s
        else:
            li=li+[s]
            s=""
            break
        j=j+1
    i=i+1
print(li)

```

Program	Test case
<p>Question</p> <p>Solution</p> <pre> st=['com', 'in', 'edu', 'com'] li=[] i=0 while i<len(st): if st[i] not in li: li=li+[st[i]] i=i+1 print(li) </pre>	['com', 'in', 'edu']

For loop:-

Program	Test case
<p>Question</p> <p>write a program to findout length of the collection without using len function</p> <p>Solution</p> <pre> count=0 for i in 'hello': count=count+1 print(count) </pre>	5

Program	Test case
<p>Question</p> <p>Wap to store all the data items inside the collection without using built in function</p> <p>Solution</p> <pre>st='helloworld' li=[] for i in st: li=li+[i] print(li)</pre>	<pre>['h', 'e', 'l', 'l', 'o', 'w', 'o', 'r', 'd']</pre>

Program	Test case
<p>Question</p> <p>For reverse</p> <p>Solution</p> <pre>st='helloworld' li=[] for i in st: li=[i]+li print(li)</pre>	<pre>['d', 'r', 'o', 'w', 'o', 'l', 'l', 'e', 'h']</pre>

Program	Test case
<p>Question</p> <p>Wap to reverse the string without using slicing</p> <p>Solution</p> <pre>st='helloworld' s="" for i in st: s=i+s print(s)</pre>	<pre>drowolleh</pre>

Program	Test case
<p>Question</p> <p>Wap to convert upper case to lower case</p> <p>Solution</p> <pre>st='HELLOWORLD&*' s="" for i in st: if 'A'<=i<='Z': s=s+(chr(ord(i)+32)) else: s=s+i print(s)</pre>	<pre>Helloworld&*</pre>

Program	Test case
Question Wap to convert lower case to upper case Solution <pre> st='helloworld&*' s="" for i in st: if 'a'<=i<='z': s=s+(chr(ord(i)-32)) else: s=s+i print(s) </pre>	HELLOWORLD&*

*write a pgm to print the uppercase characters

```
st=input("enter the character")
```

```
for i in st:
```

```
    if 'A'<=i<='Z':
```

```
        print(i , end=' ')
```

output:-

- enter the characterHeLIOWoRld

H L O R

- enter the character HELLOWOrld123

H E O W O

* write a pgm to print the lowercase characters

```
st=input("enter the character")
```

```
for i in st:
```

```
    if 'a'<=i<='z':
```

```
        print(i , end=' ')
```

output:-

- enter the character HellOwORLd123

e l l w d

- enter the character haii123\$%^

h a i i

*write a pgm to print the special characters

```
st=input("enter the character")
```

```
for i in st:
```

```
    if not ('a'<=i<='z' or 'A'<=i<='Z' or '0'<=i<='9'):
```

```
        print(i , end=' ')
```

output:-

- enter the character hello123#\$%^^

\$ % ^ ^

- enter the character hai1@2#4^&

@ # ^ &

*write a pgm to print the ASCII numbers

```
st=input("enter the character")
```

```
for i in st:
```

```
    if '0'<=i<='9':
```

```
        print(i , end=' ')
```

output:-

- enter the character hai123\$%^

1 2 3

- enter the character heklloworld123

1 2 3

*write a pgm to extract and store the special characters inside the collection

```
st=input("enter the character")
```

```
s=""
```

```
for i in st:
```

```
    if not ('a'<=i<='z' or 'A'<=i<='Z' or '0'<=i<='9'):
```

```
        s=s+i
```



```
print(s)
```

output:-

- enter the character heklloorld123

1 2 3

- enter the character haii123!@#\$%

!@#\$%

=====

*write a pgm to split the string and all the data items are store inside the collection

```
st=input("enter the collection")
```

```
li=[]
```

```
s=""
```

```
for i in st:
```

```
    if i!=' ':
```

```
        s=s+i
```

```
    else:
```

```
        li=li+[s]
```

```
        s=""
```

```
if len(st)!=0:
```

```
    li=li+[s]
```

```
print(li)
```

output:- enter the collectionhai how are you

['hai', 'how', 'are', 'you']

=====

*write a pgm to split the string and all the data items are store inside the collection in reverse order

```
st=input("enter the collection")
```

```
li=[]
```

```
s=""
```

```
for i in st:
```

```
    if i!=' ':
```

```
        s=i+s
```

```

else:
    li=li+[s]
s=""
if len(st)!=0:
    li=li+[s]
print(li)

```

output:- enter the collectionhaii how are you

```
['iiah', 'woh', 'era', 'uoy']
```

=====

*write a pgm to split the string and all the data items are store inside the collection in reverse order

```
st=input("enter the collection")
```

```
li=[]
```

```
s=""
```

```
for i in st:
```

```
    if i!=' ':

```

```
        s=s+i

```

```
    else:

```

```
        li=li+[s]

```

```
        s=""

```

```
if len(st)!=0:
```

```
    li=li+[s]

```

```
print(li[::-1])
```

output:- enter the collectionhello hai hiw are you

```
['you', 'are', 'hiw', 'hai', 'hello']
```

=====

*input:-'PySpIdErS'

output:-pYsPiDeRs'

```
st='PySpIdErS'
```

```
s=""
```

```
for i in st:
```

```

    if 'A'<=i<='Z':
        s=s+(chr(ord(i)+32))
    elif 'a'<=i<='z':
        s=s+(chr(ord(i)-32))
print(s)

```

output:- pYsPiDeRs

=====

```

*input:-'PySpIdErS123#$$%'
output:-pYsPiDeRs123#$$%
t='PySpIdErS123#$$%'
s=""

```

```

for i in st:
    if 'A'<=i<='Z':
        s=s+(chr(ord(i)+32))
    elif 'a'<=i<='z':
        s=s+(chr(ord(i)-32))
    else:
        s=s+i

```

```

print(s)
output:- pYsPiDeRs123#$$%

```

=====

*write a pgm to count the vowels in the given string

```

st='PySpIdErS123#$$%'
count=0
for i in st:
    if i in 'AEIOUaeiou':
        count=count+1
print(count)
output:- 2

```

=====

* write a program to print the fibanocii series using whike loop

```
n=int(input("enter the integer value"))
```

```
a=0
```

```
b=1
```

```
i=0
```

```
while i<n:
```

```
    c=a+b
```

```
    a=b
```

```
    b=c
```

```
    i=i+1
```

```
    print(c,end=" ")
```

output:-

- enter the integer number5

1 2 3 5 8

- enter the integer number9

1 2 3 5 8 13 21 34 55

- enter the integer number15

1 2 3 5 8 13 21 34 55 89 144 233 377 610 987

=====

*input:=="hello haii 123\$&#"

output:~{'vowel': ['e', 'o', 'a', 'i', 'i'], 'consonent': ['h', 'l', 'l', 'h'], 'num': ['1', '2', '3'], 'special character':
[' ', ' ', '\$',

'&', '#']}

```
st="hello haii 123$&#"
```

```
d={'vowel':[],'consonent':[],'num':[],'special character':[]}
```

```
for i in st:
```

```
    if 'A'<=i<='Z' or 'a'<=i<='z':
```

```
        if i in 'AEIOUaeiou':
```

```
            d['vowel']+=[i]
```

```

else:
    d['consonent']+=[i]
elif '0'<=i<='9':
    d['num']+=[i]
else:
    d['special character']+=[i]
print(d)
output:- {'vowel': ['e', 'o', 'a', 'i', 'i'], 'consonent': ['h', 'l', 'l', 'h'], 'num': ['1', '2', '3'], 'special character':
[' ', ' ', '$',
'&', '#']}

```

=====

```

*input:-"hello pypider how are yOu"
output:-{'hello': 5, 'pypider': 8, 'how': 3, 'are': 3, 'you': 3}
st="hello pypider how are yOu"
s=""
l={}
for i in st:
    if i!=' ':
        s+=i
    else:
        l[s]=len(s)
        s=""
    if len(s)!=0:
        l[s]=len(s)
print(l)

```

```

output:- {'hello': 5, 'pypider': 8, 'how': 3, 'are': 3, 'you': 3}

```

=====

```

*input:="hello pypider how are you"
output: {'hello': 5, 'pypider': 8, 'how': 3, 'are': 3, 'you': 3}
st="hello pypider how are you"

```

```

s=""
l=[]
d={}
for i in st:
    if i!=' ':
        s=s+i
    else:
        l+=s
        s=""
if len(s)!=0:
    l+=s
    for j in l:
        count=0
        for k in j:
            count+=1
d[j]=count
print(d)
output:- {'hello': 5, 'pyspider': 8, 'how': 3, 'are': 3, 'you': 3}

```

=====

```

* input:-['google.com', 'apple.in', 'youtube.co.in', 'facebook.in']
output:-['google', 'apple', 'youtube', 'facebook']
l=['goog;e.com', 'apple.in', 'youtube.co.in', 'facebook.in']
li=[]
for i in l:
    s=""
    for j in i:
        if j!='.':
            s=s+j
    else:
        li+=s

```

```
        break

print(li)

output:- ['google', 'apple', 'youtube', 'facebook']
```

=====

*write a pgm to print the series of natural numbers with the given range by using range function

```
n=int(input("enter the end value"))

for i in range(1,n+1):

    print(i,end=' ')
```

output:- enter the end value20

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

*write a pgm to print the series of odd numbers with the given range by using range function

```
n=int(input("enter the end value"))

for i in range(1,n+1):

    if i%2!=0:

        print(i,end=' ')
```

output:-

- enter the end value20

1 3 5 7 9 11 13 15 17 19

- enter the end value30

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29

=====

*write a pgm to print the series of even numbers with the given range by using range function

```
n=int(input("enter the end value"))

for i in range(1,n+1):

    if i%2==0:

        print(i,end=' ')
```

output:-

- enter the end value15

2 4 6 8 10 12 14

- enter the end value27

2 4 6 8 10 12 14 16 18 20 22 24 26

=====

*write a pgm to print the series of uppercase letters by using range function

```
for i in range(65,91):
```

```
    print(chr(i),end=' ')
```

output:- A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

=====

*write a pgm to print the series of lowercase letters by using range function

```
for i in range(97,123):
```

```
    print(chr(i),end=' ')
```

output:- a b c d e f g h i j k l m n o p q r s t u v w x y z

=====

*write a pgm to print the series of lowercase letters by using range function

```
for i in range(48,57):
```

```
    print(chr(i),end=' ')
```

output:- 0 1 2 3 4 5 6 7 8 9

=====

*write a program to print the fibanocii series using for loop and range function

```
n=int(input("enter the integer number"))
```

```
a=0
```

```
b=1
```

```
for i in range(0,n-2):
```

```
    c=a+b
```

```
    a=b
```

```
    b=c
```

```
print(c,end=" ")
```

output:-

- enter the integer number 6

1 2 3 5

- enter the integer number 9

1 2 3 5 8 13 21

- enter the integer number15

1 2 3 5 8 13 21 34 55 89 144 233 377

=====

*write a pgm to store the fibinocii numbers in the collection within given range

```
n=int(input("enter the integer number"))
```

```
a=0
```

```
b=1
```

```
l=[]
```

```
l+=[a]
```

```
l+=[b]
```

```
for i in range(0,n-2):
```

```
    c=a+b
```

```
    a=b
```

```
    b=c
```

```
    l+=[c]
```

```
print(l,end=" ")
```

output:-

- enter the integer number8

[0, 1, 1, 2, 3, 5, 8, 13]

- enter the integer number17

[0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987]

=====

*write a pgm to check whether given number is fibnocii number or not

```
n=int(input("enter the integer number"))
```

```
a=0
```

```
b=1
```

```
flag=False
```

```
if n in [0,1]:
```

```
    print("given value is fibonocii")
```

else:

```
for i in range(0,n):
```

```
    c=a+b
```

```
    a=b
```

```
    b=c
```

```
    if c==n:
```

```
        flag=True
```

```
        break
```

```
if flag==True:
```

```
    print("given value is fibonocii")
```

```
else:
```

```
    print("given value is not fibonocii")
```

output:-

- enter the integer number 4

given value is not fibonocii

- enter the integer number 56

given value is not fibonocii

- enter the integer number 78

given value is not fibonocii

=====

pattern programs:

```
1)for i in range(0,5):
```

```
    for j in range(0,5):
```

```
        print(i,j,end=" ")
```

```
    print()
```

output:

```
0 0 0 1 0 2 0 3 0 4
```

```
1 0 1 1 1 2 1 3 1 4
```

```
2 0 2 1 2 2 2 3 2 4
```

```
3 0 3 1 3 2 3 3 3 4
```

4 0 4 1 4 2 4 3 4 4

=====

2)for i in range(0,5):

 for j in range(0,5):

 print('*',end=" ")

 print()

output:

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

=====

3)for i in range(0,5):

 for j in range(0,5):

 if i==4:

 print('*',end=" ")

 else:

 print(' ',end=" ")

 print()

output:-

* * * * *

=====

4)for i in range(0,5):

 for j in range(0,5):

 if i==0:

```
    print('*',end=" ")
else:
    print(' ',end=" ")
    print()
```

output:-

* * * * *