

Program no:

Aim : Generate a list of four digit numbers in a given range with all their digits even and the number is a perfect square

Program :

```
print (List of four digit number with all numbers  
even and the number is a perfect square)
```

```
list = [] . list2 = []
```

```
print (" Enter the size of list : ")
```

```
size = int (input ())
```

```
print (" Enter ", +size, " 4 digit numbers one by one")
```

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

```
    a = int (input ())
```

```
    if ( a >= 1000 && a <= 9999 ):
```

```
        list . append (a)
```

```
    else :
```

```
        print ( a , " is not a 4 digit number")
```



```
for i in list :
```

```
    if i % 2 == 0 :
```

```
        j = 1
```

```
        while (j * j <= i):
```

```
            if ((i % j == 0) and (i / j == j)):
```

```
                print(i) , list2.append(i)
```

```
                j = j + 1
```

```
print(list2)
```

Result :

The program has been executed and the output was verified .

Output

Generate a list of four digit numbers in a given range with all their digits even and the number is a perfect square.

.) Enter the size of list : 4

Enter 4 4digit numbers one by one :

1331 , 1225 , 1156 , 1296

List with even numbers and perfect square 4 digit numbers are :

[1156, 1296]

.) Enter the size of list : 3

Enter 3 4digit numbers one by one :

1476 , 3025 , 2116

List with even and perfect square 4 digit numbers are :

[2116]