Aim:

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

Algorithm:

```
for i in range(2000,10000,2):

 for j in range(38,1000,1):

 if i == j*j:

 string = str(i)

 if int(string[0])%2 == 0 and int(string[1])%2 == 0 and
int(string[2])%2 == 0 and int(string[3])%2 == 0:

 print(i)
```

Output: