```
"""
WAP to print the following pattern
     1
    121
   12321
"""

space = int(input('Enter Step Size: '))
c = '1'
while space >= 1:
    print(' ' * space, int(c) ** 2)
    c += '1'
    space -= 1

```

```
 1 # WAP to count the number of words, vowels and
   spaces
 2
 3 phrase = input('Enter the Sentence: ')
 4 vowel = space = 0
 5 words = len(phrase.split(' '))
 6
 7 for ch in phrase:
 8     if ch == ' ':
 9         space += 1
10
11     if ch in 'AEIOUaeiou':
12         vowel += 1
13
14 print('There %s Words, %s vowels and %s spaces'
    % (words, vowel, space))
15
```

```
 1 # A Welcome Program
 2
 3 print('Hi!')
 4 print('You are right now in the world of ATLANTIS
   !\n')
 5 name = input('Please Enter Your Name\n')
 6 print('\nNice to meet you {}'.format(name.upper
   ()))
 7 age = int(input('What\'s your age?\n'))
 8
 9 if age < 18:
10
11     print('You can fulfill the age requirement in
    the next {} years!'.format(18 - age))
12 else:
13     print('Welcome!!!')
14
```

```python
# WAP to print the mirror image of simple strings

tstr = input('Enter String: ')

print("The original string is : " + str(tstr))

mir_dict = {'b': 'd', 'd': 'b', 'i': 'i', 'o': 'o', 'v': 'v', 'w': 'w', 'x': 'x'}
res = ''

for ele in tstr:
    if ele in mir_dict:
        res += mir_dict[ele]

    else:
        res = "Not Possible"
        break

print("The mirror string : " + str(res)[::-1])

```

```
1  # WAP to count the number of words and characters
     with the percentage of characters that are
   alphanumeric
2
3  s = input('Enter the Sentence: ')
4
5  words = len(s.split())
6  chars = len(s)
7
8  alphanum = 0
9
10 for ch in s:
11     if ch.isalnum():
12         alphanum += 1
13
14 charpercent = (alphanum/chars)*100
15
16 print(s)
17 print("Number of Words: ", words)
18 print("Number of Characters: ", chars)
19 print("Percentage of characters that are
   alphanumeric: ", charpercent)
20
```

```
 1 # WAP to print the longest word in a list of
   words
 2
 3 words = eval(input('Enter the List of Words: '))
 4
 5 colossal = []
 6 tmp = words[0]
 7
 8 for i in range(len(words)):
 9     if len(tmp) > len(words[i]):
10         continue
11
12     elif len(words[i]) > len(tmp):
13         tmp = words[i]
14
15 print(tmp)
16
```