

Practice Set 2.1 – Loops, Conditions, and Functions

1. Write a Python function that accepts a list of strings and returns a string that contains all the words from the list.

```
input = ["hello", "goodbye", "omg", "wow"]  
outPut: "hello goodbye omg wow "
```

2. Take two int values from user and print the greater one.
3. A school has the following grading system for marks:
 - below 25 – F
 - 25 to 44 – E
 - 45 to 50 – D
 - 51 to 60 – C
 - 61 to 80 – B
 - Above 80 – A

Ask the user to enter their mark and RETURN their grade.

4. Write a Python **function** that will accept the base and height of a triangle and compute the area.
5. Write a Python **function** to solve $\sqrt{(x + y) * (x + y)}$. (hint – you may need to import the math library)
6. Write a Python program to compute the distance between the points: (x1, y1) and (x2, y2). Hint: There's a formula for this.

BONUS! (if you're up for a challenge)

7. Given a list of integers, return **indices** of the two numbers such that they add up to a specific target.

```
# Example *****  
# Given: nums = [2, 7, 11, 15], target = 9,  
# Because nums[0] + nums[1] = 2 + 7 = 9,  
# return [0, 1].
```

Here is some code to start you off:

```
1. def twoNumSum(nums, target):  
2.     # your code here  
3.  
4. # test cases (you should test multiple cases):  
5. twoNumSum([2, 7, 11, 15], 9) # this should return [0, 1]  
6. twoNumSum([4, 9, 13, 20], 29) # this should return [1, 3]
```