

# Fresher Assessment - 1

1. Write a program to find the smallest missing positive value from the below array.

@arr = ( -1, 1, 2, 3, 0, -2, 7, 8)

Output: 4

**Examples:**

@arr1 = (10, 20, 1, 2)

Output is 3

@arr1 = (-5, 0, 2, 10)

Output is 1

2. Generate the combination of below array and find its sum is equal to given value. Give the count of no. of equal sums.

@arr = (4, 4, 5, 3)

sum = 8

Output: 2

**Explanation:**

Above array has 6 combinations such as (4,4), (4,5), (4,3), (4,5), (4,3), (5,3)

Combinations equals to given sum value is 2

**Example:**

@arr1 = (-7, 1, 5, 1, 4)

sum = 6

Above array has 10 combinations such as (-7,1), (-7,5), (-7,1), (-7,4), (1,5), (1,1), (1,4), (5,1), (5,4), (1,4)

Combinations equals to given sum value is 4

3. Pick the 0th and even numbered index values from array(arr1) and odd numbered index values from array(arr2) and produce the sum.

Note: Both the array length will be same.

@arr1 = (10,20,30,40,60)

@arr2 = (70,80,90,100,200)

Output: 280

4. Capture the first and last name from the given text and print.

i) Try using regex

ii) Any other methods

\$text = "Hello Gary Williams"

Output:

First Name : Gary

Last Name : Williams

**5. Filter the integers from below array and store it to a new array.**

@arr = (1, 2, 'a', 'b', '3', 'c', '4', 'd', 5)

Output: (1, 2, 5)

**6. Sum the diagonal elements(1+6+3+8) in a given multi-dimensional array.**

```
$arr = [  
    [1,2,3,4],  
    [5,6,7,8],  
    [1,2,3,4],  
    [5,6,7,8]  
]
```

Output: 18

**7. Perform sum for 1st & 3rd column and multiplication for 2nd & 4th column in a given multidimensional array.**

```
$arr = [  
    [1,2,3,4],  
    [5,6,7,8],  
    [1,2,3,4],  
    [5,6,7,8]  
]
```

Output:

Sum of column 1 is 12

Multiple of column 3 is 144

Sum of column 3 is 20

Multiple of column 4 is 1024

**8. Read a file(sampleFile.txt) and sort the lines in ascending order and then store it into a new file.**

sampleFile.txt contains below lines.

*Water melon*

*Orange*

*Apple*

*Banana*

*Grapes*

*Fig*

*Mango*

*Musk Melon*

Output:

Apple  
Banana  
Fig  
Grapes  
Mango  
Musk Melon  
Orange  
Water melon

**9. Get a alphanumeric value from the user and remove the 1st number in it and then reverse the same text.**

User Input: abc123def

Output: fed32cba

**10. Filter the lines containing a word "melon" from a file(sampleFile.txt) and and store it into a new file.**

sampleFile.txt contains below lines.

Python is an interpreted, high-level, general-purpose programming language.  
Watermelon is a delicious low-calorie treat with numerous benefits.  
Animal, any of a group of multicellular eukaryotic organisms.  
Species of melon that has been developed into many cultivated varieties is called Musk Melon.  
Get Behind the Scenes with Your Favorite Shows!

Output:

Watermelon is a delicious low-calorie treat with numerous benefits.  
Species of melon that has been developed into many cultivated varieties is called Musk Melon.