Fresher Assessment - 2

11) Find the perfect square values from the given array

@arr = (16, 6, 8, 4, 144)

Output:
(16, 4, 144)

12) Remove the character in a given values using the key as index

%names = (3 => 'Apple', 5 => 'Water Melon', 10 => 'Orange', 2 => 'Fig')

Output:
(Appe, WaterMelon, Orange, Fi)

13) Get two values from the user (Character & Index) and then replace the particular character in given index of a text

$text = 'Gavs Technologies'

Input: X 5
Output: Gavs Xechnologies

14) Transpose the given matrix

```
$arr1 = [
   [1,2,3,4],
   [5,6,7,8],
   [1,2,3,4],
   [5,6,7,8]
]
```

Output:

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

15) Find compound interest

Formula:
Compound Interest = P(1 + R/100)^T
Where,
P is principle amount
R is the rate and
T is the time span

Input:
Principle (amount): 1200
Time: 2
Rate: 5.4

Output:
Compound Interest = 1333.099243 (Also perform round operation => CI is 1333)

16) Given a array, write a Perl program to swap first and last element of the array.

Examples:

Input: (12, 35, 9, 56, 24)
Output: (24, 35, 9, 56, 12)

Input: (1, 2, 3)
Output: (3, 2, 1)

17) Count the occurrence of each word in a array and construct as hash

@arr = ('sun', 'mon', 'tue', 'sun', 'mon', 'tue', 'mon', 'tue', 'thu')

Output:
('sun'=>2, 'mon'=>3, 'tue'=>3, 'thu'=>1)

18) Given two arrays, sort the values of one array using the second array.

Examples:

Input:
@array1 = ("a", "b", "c", "d", "e", "f", "g", "h", "i")
@array2 = (0, 1, 1, 0, 1, 2, 2, 0, 1)

Output:
('a', 'd', 'h', 'b', 'c', 'e', 'i', 'f', 'g')

Input:
@array1 = ("g", "e", "e", "k", "s", "f", "o", "r", "g", "e", "e", "k", "s")
@array2 = (0, 1, 1, 0, 1, 2, 2, 0, 1)

Output:
('g', 'k', 'r', 'e', 'e', 'g', 's', 'f', 'o')

19) Given two sentences as strings A and B. The task is to return a array of all uncommon words. A word is uncommon if it appears exactly once in any one of the sentences, and does not appear in the other sentence.

Examples:

Input:
$A = "Internet"
$B = "Learning from Internet"

Output:
('Learning', 'from')

Input:
$A = "apple banana mango"
$B = "banana fruits mango"

Output:
('apple', 'fruits')

20) Given a long integer, we need to find if the difference between sum of odd digits and sum of even digits is 0 or not. The indexes start from zero (0 index is for leftmost digit).

Examples:

Input: 1212112
Output: Yes
Explanation:-
the odd position element is 2+2+1=5
the even position element is 1+1+1+2=5
the difference is 5-5=0.so print yes.

Input: 12345
Output: No
Explanation:-
the odd position element is 1+3+5=9
the even position element is 2+4=6
the difference is 9-6=3 not equal
to zero. So print no.