

## Fresher Assessment - 3

**21. Write a Perl program to convert temperatures to and from Celsius, Fahrenheit.**

Formula:  $c/5 = f-32/9$  [ where c = temperature in Celsius and f = temperature in Fahrenheit ]

Output:

60°C is 140 in Fahrenheit  
45°F is 7 in Celsius

**22. Write a Perl program to construct the following pattern, using a nested for loop.**

```
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

**23. Write a Perl program that prints each item and its corresponding datatype from the following array.**

@dataarray = (1452, 11.23, undef, 'True', 'w3resource', [0, -1], {class:'V', section:'A'})

**24. Write a Perl program which iterates the integers from 1 to 50. For multiples of three print "ABC" instead of the number and for the multiples of five print "XYZ". For numbers which are multiples of both three and five print "ABCXYZ".**

Output:

```
1
2
ABC
4
XYZ
.
.
ABCXYZ (for 15) .....
```

**25. Write a Perl program which takes two digits m (row) and n (column) as input and generates a two-dimensional array. The element value in the i-th row and j-th column of the array should be i\*j.**

Note:

i = 0,1..., m-1  
j = 0,1, n-1.

Input: Rows = 3, Columns = 4

Output: [[0, 0, 0, 0], [0, 1, 2, 3], [0, 2, 4, 6]]

**26. Write a Perl program to validate the password entered by users.**

Validation:

At least 1 letter between [a-z] and 1 letter between [A-Z].

At least 1 number between [0-9].

At least 1 character from [\$#@].

Minimum length 6 characters.

Maximum length 16 characters

Input 1: aA1@xyz

Output 1: Valid

Input 2: aA1xyz (or) aA1@ (or) 123456

Output 2: Invalid

**27. Write a Perl function that accepts a string and calculate the number of upper case letters and lower case letters.**

Input: 'The quick Brow Fox'

Output:

No. of Upper case characters : 3

No. of Lower case Characters : 12

**28. Write a Perl function that takes a array and returns a new array with unique elements of the first array.**

Input: (1,2,3,3,3,3,4,5)

Output: (1, 2, 3, 4, 5)

**29. Write a Perl program that accepts a hyphen-separated sequence of words as input and prints the words in a hyphen-separated sequence after sorting them alphabetically.**

Input: green-red-yellow-black-white

Output: black-green-red-white-yellow

**30. Write a Perl program to remove an empty array(s) from a array of arrayref(s).**

Input: [(), (), ('), ('a', 'b'), ('a', 'b', 'c'), ('d')]

Output: [('), ('a', 'b'), ('a', 'b', 'c'), 'd']

# **Structured Query Language**

**Write a query for following with your own table schema assumption.**

- 1) Difference between DML, DDL & DCL
- 2) Primary Vs Foreign Key
- 3) Group by and Order by
- 4) Joins (Inner/Outer/Left/Right)
- 5) Select/Insert/Update

## **Linux**

- 1) List down at-least 15 Linux commands and its operation