

# DevOps Engineer Interview Questions

## Task 1

Write a program to read input from a file called "colors.txt" and to find the sum of each colour.

Sample content of input file :

```
Red 1
Blue 5
Yellow 3
Green 4
Magenta 3
Blue 2
RED 8
gReen 0
```

Sample Output:

```
Blue 7
Green 4
Magenta 3
Red 9
Yellow 3
```

Note:

1. Feel free to use any programming language (make sure to execute it on a linux server)
2. The program needs to take care of unnecessary spacing between the colours and the numbers
3. The program needs to take care of uppercase and smaller case (should be case insensitive)
4. The program needs to read input from a file and the output should be displayed in STDOUT
5. Provide a single command that can be used to execute the program provided the input file already exists in the same location as the code file.

## Task 2

As a devops engineer you have been tasked to build a docker container for nginx web server.

1. Create a public repo on docker hub

2. Create a custom image with nginx web server installed and running
3. The image should have curl, wget and python3 package installed
4. As part of the solution you should provide:
  - a. The Dockerfile used with best practices
  - b. Details of docker image pushed to a public repo on docker hub.
  - c. Docker build command used to build the container
  - d. Docker run command to run the container on end user's system
5. End users should be able to use the Dockerfile to build and launch their own nginx container.
6. When the container is launched, it should show the default web page of nginx

## Task 3

Given a list of users and their respective public key, write a script to automate setting up user account for all the users on a linux server with passwordless ssh access.

1. Feel free to use any programming language or automation tools as you feel fit (make sure to execute it on a linux server)
2. Provide detailed description of how to run the solution including how to setup the solution and how to execute it using a single command.