Exercise 2.1: Sizes of the Default Linux Directories

Use the **du** utility to calculate the overall size of each of your system's top-level directories.

Type the command:

```
$ du --help
```

for hints on how to obtain and display this result efficiently.

Solution 2.1

To obtain a full list of directories under / along with their size:

```
$ sudo du --max-depth=1 -hx /
```

```
4.3M    /home
16K     /lost+found
39M     /etc
4.0K    /srv
3.6M    /root
178M    /opt
138M    /boot
6.1G    /usr
1.1G    /var
16K     /mnt
4.0K    /media
869M    /tmp
8.4G    /
```

Where we have used the options:

- `--maxdepth=1`: Just go down one level from `/` and sum up everything recursively underneath in the tree.
- `-h`: Give human-readable numbers (KB, MB, GB).
- `-x` Stay on one filesystem; don't look at directories that are not on the `/` partition. In this case that means ignore:

  `/dev /proc /run /sys`

  because these are pseudo-filesystems which exist in memory only; they are just empty mount points when the system is not running. Because this is a **RHEL 7** system, the following mount points are also not followed:

  `/bin /sbin /lib /lib64`

  since they are just symbolically linked to their counterparts under `/usr`.

