

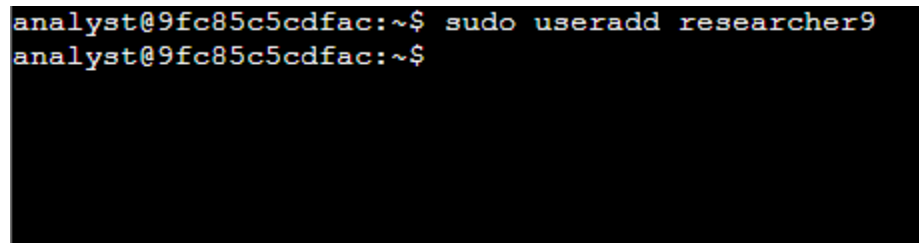
# Task 1. Add a new user

A new employee has joined the Research department. In this task, you must add them to the system. The username assigned to them is `researcher9`.

1. Write a command to add a user called `researcher9` to the system.

The command to complete this step:

```
sudo useradd researcher9
```



```
analyst@9fc85c5cdfac:~$ sudo useradd researcher9
analyst@9fc85c5cdfac:~$
```

**Next**, you need to add the new user to the `research_team` group.

2. Use the `usermod` command and `-g` option to add `researcher9` to the `research_team` group as their primary group.

The command to complete this step:

```
sudo usermod -g research_team researcher9
```

```
analyst@9fc85c5cdfac:~$ sudo usermod -g research_team researcher9
analyst@9fc85c5cdfac:~$
```

You could alternatively use the following variation of `useradd` when creating the user to perform both steps at once:

```
sudo useradd researcher9 -g research_team
```

```
analyst@207def3ce549:~$ sudo useradd researcher9 -g research_team
useradd: user 'researcher9' already exists
analyst@207def3ce549:~$
```

## Task 2. Assign file ownership

The new employee, `researcher9`, will take responsibility for `project_r`. In this task, you must make them the owner of the `project_r.txt` file.

The `project_r.txt` file is located in the `/home/researcher2/projects` directory, and owned by the `researcher2` user.

- Use the `chown` command to make `researcher9` the owner of `/home/researcher2/projects/project_r.txt`.

The command to complete this step:

```
sudo chown researcher9 /home/researcher2/projects/project_r.txt
```

```
analyst@207def3ce549:~$ sudo chown researcher9 /home/researcher2/projects/project_r.txt
analyst@207def3ce549:~$
```

## Task 3. Add the user to a secondary group

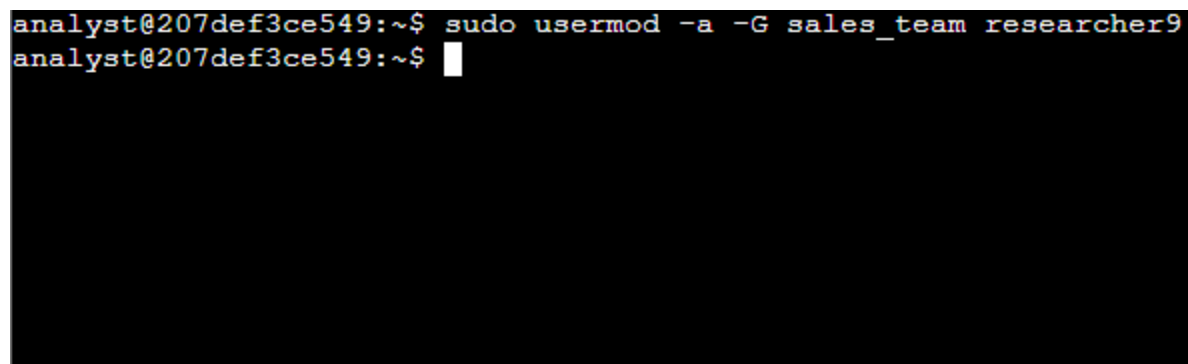
A couple of months later, this employee's role at the organization has changed, and they are working in both the Research and the Sales departments.

In this task, you must add `researcher9` to a secondary group (`sales_team`). Their primary group is still `research_team`.

- Use the `usermod` command with the `-a` and `-G` options to add `researcher9` to the `sales_team` group as a secondary group.

The command to complete this step:

```
sudo usermod -a -G sales_team researcher9
```

A terminal window with a black background and white text. The prompt is `analyst@207def3ce549:~$`. The command `sudo usermod -a -G sales_team researcher9` is entered. The prompt changes to `analyst@207def3ce549:~$` and a cursor is visible.

```
analyst@207def3ce549:~$ sudo usermod -a -G sales_team researcher9
analyst@207def3ce549:~$
```

## Task 4. Delete a user

A year later, `researcher9`, decided to leave the company. In this task, you must remove them from the system.

1. Run a command to delete `researcher9` from the system:

```
sudo userdel researcher9
```

This command will output the following message:

```
analyst@207def3ce549:~$ sudo userdel researcher9
userdel: group researcher9 not removed because it is not the primary
group of user researcher9.
analyst@207def3ce549:~$
```

This is expected.

**Note:** When you create a new user in Linux, a group with the same name as the user is automatically created and the user is the only member of that group. After removing users, it is good practice to clean up any such empty groups that may remain behind.

2. Run the following command to delete the `researcher9` group that is no longer required:

```
sudo groupdel researcher9
```

```
analyst@207def3ce549:~$ sudo groupdel researcher9
analyst@207def3ce549:~$
```

