

EXP – 3: Demonstrate the working with remote repositories**Requirement:**

1. Create a dictionary of 5 – employees working for an organization. The dataset consists of employee name, age and salaries
2. Compute the total salary of employees working for the organization
3. Find the minimum and maximum salaries
4. Find the employee who is drawing highest salary
5. List employee names whose salary is greater than 25000/- (or dynamic input)

1. Setup Your Environment**Install Git:**

- Ensure you have Git installed on your system. You can download it from git-scm.com.

Install VSCode:

- Download and install VSCode from code.visualstudio.com.

Install Python:

- Make sure Python is installed on your system. You can download it from python.org.

2. Clone a Remote Repository

1. **Open VSCode** and open the integrated terminal (``Ctrl + ```).
2. **Clone the Repository:** Use the following command to clone a repository from GitHub. Replace `<URL>` with your repository's URL:

```
git clone <URL>
```

3. **Navigate to the Repository Directory:**

```
cd repository-name
```

3. Work on Your Project

1. **Open the Project in VSCode:** Open VSCode and select File > Open Folder... to open the cloned repository folder.
2. **Create a Python File:** In VSCode, create a new file with a .py extension (e.g., main.py) and write your Python code.

4. Make Changes and Commit

1. **Check Repository Status:** Use the Git panel in VSCode (usually on the left sidebar) to see the status of your repository.
2. **Stage Changes:** In the Git panel, stage the changes by selecting the files you want to commit.
3. **Commit Changes:** Add a commit message and commit the changes using the Git panel or the terminal:

```
git add .  
git commit -m "Your commit message"
```

5. Push Changes to GitHub

1. **Push Changes:** Use the following command to push your changes to the remote repository:

```
git push origin main
```

Replace main with the branch name if you're working on a different branch.

6. Pull Updates from GitHub

1. **Pull Updates:** To update your local repository with changes from the remote repository, use:

```
git pull origin main
```

7. Additional Tips

- **Branching:** Create and switch branches for new features or fixes:

```
git checkout -b new-branch
```

- **Merge Branches:** Merge changes from one branch to another:

```
git checkout main  
git merge new-branch
```

- **Resolve Conflicts:** If you encounter conflicts during a merge, resolve them manually and then commit the changes.