***Course Code:CS-368***

***Section: A***

***Course Title: Software Re-Engineering***

***Assignment No.1***

***Group Members***

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***What are refactoring supports in your IDE***

***IDE:*** *PhpStorm*

**Refactoring:**

The process of improving your code without creating a new feature/functionality is called refactoring.

***Refactoring in PhpStorm***

1. **Invoke refactoring:**

PhpStorm allows you to select an item to refactor.You can select a file/folder in the **Project** tool window or expression or symbol in the editor. Press Ctrl+Alt+Shift+T to open a list of refactoring to choose from.

| **Name** | **Description** |
| --- | --- |
| Safe Delete | To ensure you do not delete a file that is referenced in source code. |
| Copy/Move | Copies/Move an element. |
| Extract Method | Help reduce code duplication. |
| Extract Constant | Declares a new constant and initializes it with a selected expression. |
| Extract Field | Declares a new field and initializes it with a selected expression |
| Extract Parameter | Adds a new parameter to a method declaration and automatically updates method calls accordingly. |
| Include Variable | Declares a new variable and initializes it with a selected expression. |
| Rename | Renames an element. |
| Inline | Inline an element. Act as the opposite of extracting. |
| Change Signature | Changes a call signature of a method. |

1. **Preview Refactoring Changes:**

To see potential changes, click **Preview** in the **Refactoring Preview** dialog.Check the changes that are going to be made in the [Find](https://www.jetbrains.com/help/phpstorm/find-tool-window.html) tool window. You can exclude Delete or remove Ctrl+X changes that you consider unnecessary**.**

1. **Resolve Conflicts:**

If phpStorm finds a problem with your refactoring, with the list of conflicts and their descriptions. You can click **continue** to ignore the problem and proceed to preview in the **find** tool window or Click **Show Conflicts in View** to open the conflict entries in the **Find** tool window and deal with them further.