



BridgeLabz

Employability Delivered

Employee
Wage
Computation
Problem



Outcome

1. Ability to work with Bash Shell Scripts Programming Constructs
2. Ability to work with basic git flows.



GIT Flow Expectations

- Create Repo for Shell Scripts
- Add and Commit Files
- Follow Message Hygiene
- During Commit specify Add or Refactor in the message beginning
- Create Branch
- Push to Remote Master and Branch
- Merge and Resolve Conflicts
- Ability to look into History of Files
- Comfortable with Git Commands

Shell Programming Expectations

- Use of Shell Programming Constructs
- Use of proper names for the File Names, Variables and Constants
- Use of Proper Indentations
- Avoiding Printing to standard terminal instead use debug
- No Commented Codes
- Follow DRY Principle – Do not Repeat Yourself
- Comfortable with Debug Execution Threads
- Comfortable with Shell Commands



Rules

- Create empWageComputation.sh
- Start with Welcome message in the Main Branch
- Every Use Case (UC) in the Corresponding UC Branch
- For e.g. UC-1 Branch Name – EmployeeAttendanceUC
- Follow Programming Hygiene and DRY principle
- Testing the Program before pushing to Remote
- On Completion of every UC, do the following
 - Merge Local Branch with Local Master
 - Push to Remote Branch
 - Merge Local Master with Local Branch
 - Push Local Master to Remote Master



START

Start with Displaying
Welcome to Employee
Wage Computation
Program on Master Branch



UC 1

Check Employee is Present or Absent

- Use ((RANDOM)) for Attendance Check



UC 2

Calculate Daily Employee Wage

- Assume Wage per Hour is 20
- Assume Full Day Hour is 8



UC 3

Add Part time Employee & Wage

- Assume Part time Hour is 8



UC 4

Solving using
Switch Case
Statement



UC 5

Calculating Wages for a Month

- Assume 20 Working Day per Month



UC 6

Calculate Wages till
a condition of total
working hours or
days is reached for
a month

- Assume 100 hours and 20 days



UC 7

Refactor the Code
to write a Class
Method to
Compute Employee
Wage



UC 8

Compute Employee Wage for multiple companies

- **Note:** Each Company has its own wage, number of working days and working hours per month
- Use Class Method



UC 9

Ability to save the Total Wage for Each Company

- **Note:** You can Create EmpWageBuilder for each Company



UC 10

Ability to save the Total Wage for Each Company

- **Note:** You can Create EmpWageBuilder for each Company



UC 11

Ability to manage Employee Wage of multiple companies

- **Note:** Refactor to have one EmpWageBuilder to manage for Wage for multiple Company
- Create CompanyEmpWage class and let EmpWageBuilder has array of many CompanyEmpWage Object



UC 12

Refactor to have list of multiple companies to manage Employee Wage.

- **Note:** Refactor to use ArrayList instead of array



UC 13

Store the Daily
Wage along with
the Total Wage



UC 14

Ability to get the
Total Wage when
queried by Company

- Create Method in
EmpWageBuilder to get total
wage by Company



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Thank
You