Requirements:

There are 4 types qualifications in company (Junior, Middle, Senior, Lead) with salary and productivity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Junior | Middle | Senior | Lead |
| Salary | 400 | 750 | 1000 | 1400 |
| Productivity | 1 | 2 | 3 | 4 |

1/criterion: Maximum productivity with fixed sum

2/criterion: Minimum cost with fixed priductivity

3/ minimum amount of workers with qualification higher than Junior, productivity is fixed

Program input: amount of money, required productivity and chose criterion/

Program output: number of required workers of each qualification meet conditions of customer

Test cases

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID | Priority | Requirements |  |  |  | Expected result |
| Checking valid input data | | | | | | |
| A1 | High | Enter the am out of money | DEV-5 | - | **Enter not valid value of sum**  1.Input negative or letters sum:  -100, sum | 1.Output message  Error input. Try input sum again:  2.Repeat input of sum |
| A2 | High | Enter the am out of money | DEV-5 | - | **Enter sum less than minimum salary(400)**  1.Input sum: 300 | 1.Output message: Sum should be more than 400. Try input sum again  2.Repeat input of sum |
| A3 | High | Enter productivity | DEV-5 | - | **Enter not valid value of productivity**  1.Input as productivity negative value or letters: 0, productivity | 1.Output message:  Error input. Productivity should be more than 0.  Try input productivity again:  2.Repear productivity input |
| A4 | High | Enter criterion of choice | DEV-5 | - | **Enter not valid value of criterion**  1.Input criterion:  Criterion | 1.Output message :  Error input.  Try input criterion again MaxProductivity, MinCost, MinHightSkillWorkers  2.Repeat criterion input |
| Checking criterion of maximum productivity with fixed sum | | | | | | |
| B1 | High |  | DEV-5 | - | **Enter sum more for given productivity**  1.Input sum:  9000  2.Input productivity:  1  3. Input criterion : maxProductivity | 1.Output:  Middle 1 |
| B2 | High |  | DEV-5 | - | **Enter sum insufficient for given productivity**  1.Jnput sum:  1000  2.Input productivity:  4  3. Input criterion : maxProductivity | 1.Output:  This sum is insufficient to input productivity  Max productivity for this sum - 3  Senior 1 |
| Checking criterion of minimum cost with fixed productivity | | | | | | |
| С1 | High |  | DEV-5 | - | **Enter sum insufficient for given productivity**  1.Input sum:  1000  2.Input productivity:  7  3.Input criterion:  minCost | 1.Output:  This sum is insufficient to input productivity  Max productivity for this sum - 3  Senior 1 |
| С2 | High |  | DEV-5 | - | **Enter sum more for given productivity**  1.Input sum:  1000  2.Input productivity:  1  3.Input criterion:  minCost | 1.Output:  Junior 1 |
| Checking criterion minimum amount of workers with qualification higher than Junior, productivity is fixed | | | | | | |
| D1 | High |  | DEV-5 | - | **Enter sum more for given productivity**  1.Input sum:  1600  2.Input productivity  4  3. Input criterion: MinHightSkillWorkers | 1.Output:  Junior 4 |
| D2 | High |  | DEV-5 | - | **Enter sum insufficient for given productivity**  1.Input sum:  900  2.Input productivity  3  3. Input criterion: MinHightSkillWorkers | 1.Output  Junior 2 |
| D3 | High |  | DEV-5 | - | **Checking priority Junior**  1.Input sum:  1000  2.Input productivity  3  3. Input criterion: MinHightSkillWorkers | 1.Output  Junior 1  Middle 1 |