### **Program 1:**

|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| Number of children | Processing items: none  Algorithm:  1. User enters the number of children in their household  2. if number if children is greater than 4, return $4000  3. else return number of children \* 1000 | The amount of tax credit available |

### **Program 2:**

|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| Salary  Teacher [y/n] | Processing items: none  Algorithm:  1. User enters salary and whether or not they are a teacher  2. if user enters y or Y for teacher then the new salary is (.07 \* salary) + salary. Return / output that new salary as well as $200 bonus.  3. if user enters n or N for teacher then the new salary is (.04 \* salary) + salary. Return / output that new salary as well as $500 bonus | User's new salary  Amount of bonus |

### **Program 3:**

|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| Systolic pressure  Diastolic pressure | Processing items: none  Algorithm:  1. user enters systolic and diastolic pressure  2. if systolic pressure > 140 or diastolic pressure > 90, patient has high blood pressure  3. else patient has normal blood pressure | Whether or not user has normal blood pressure |

### **Program 4:**

|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| length  width  height | Processing items: volume  Algorithm:  1. enter length, width and height of the fish tank  2. volume = length \* width \* height  3. amount of conditioner to add = volume / 100  4. display amount of conditioner to add | amount of conditioner to add |