PA1 problem 1

Count variable = 1

While (reading in the userString)

If( the current character == the next character)

Count variable + 1

Else

If (the current character doesn’t = the next character)

Add count variable to a new string as character

Add the current character to the string as next character

Count variable = 1

Problem 2

|  |  |  |
| --- | --- | --- |
| Input:  Played Pac-man?  Played Dig-Dug?  Played Galaga?  Played Rally-X?  If yes Minutes played Pac-Man  If yes Minutes played Dig-Dug  If yes Minutes played Galaga  If yes Minutes played Rally-x | Process:  sumTotal = minutes played of each game added together | Output:  sumTotal  Pac-Man played for pacmanMinutes  Dig-Dug played for digdugMinutes  Galaga played for galagaMinutes  Rally-X played for rallyxMinutes |

A screenshot of a diagram

Description automatically generated

PA 1 Problem 3

Input:

|  |  |  |
| --- | --- | --- |
| Input:  Motion Intensity  Simulation quality  Genre  Duration | Processes:  Test to see if Genre is space exploration/deep-sea adventure or duration >= 5 minutes if both are false output option 2 if one is true continue  Test to see if motion intensity is <=4 if false output option 2 if true continue  Test to see if simulation quality is high=definition if false output option 2 if true output option 1 | Output:  Option 1:  The experience is fit for guest.  Option 2:  The experience is not fit for guest. |

A screenshot of a diagram

Description automatically generated

PA 1 Problem 4

|  |  |  |
| --- | --- | --- |
| Input:  File of all crew members with number of missions | Processes:  Test to see if missions complete is < 50  If true output option 1 else continue  Test to see if missions complete is >= 50 and < 75  If true output option 2 else continue  Test to see if missions complete is >= 75 and < 100  If true then output option 3 else continue  Test to see if missions complete is >= 100  if true output option 4  continue till file is empty | Output:  Option 1:  Squadron Novice, sorry you do not qualify.  Option 2:  Squadron Specialist, you are assigned to support missions.  Option 3:  Squadron Veteran, you are assigned to high-profile missions.  Option 4:  Squadron Elite, you are assigned flagship missions. |

A diagram of a software program

Description automatically generated with medium confidence