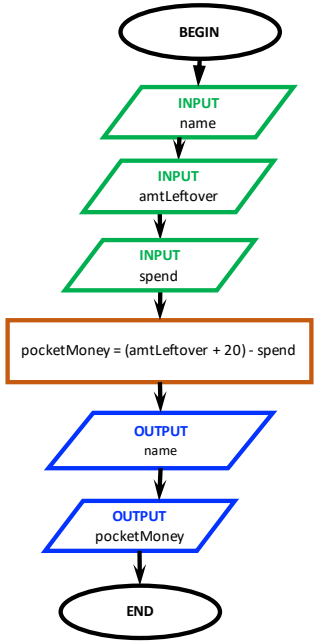
NAME: Navid Gashti
Partner: Andrew Gharlos
CLASS: MW 8 - 10:20am



VARIABLE LIST

INPUT

name
amtLeftover
spend

OUTPUT

name
pocketMoney

Processing

END

Name: Andrew Gharios & Navid Gutshi
Class: MW 8AM

BEGIN PROGRAM
    INPUT name
    INPUT amtLeftover
    INPUT spent

    CALC pocketMoney = (amtLeftover + 20) - spent

    OUTPUT name
    OUTPUT pocketMoney
END PROGRAM

VARIABLE LIST
    INPUT
    name
    amtLeftover
    spent
    OUTPUT
    pocketMoney

    PROCESSING

```
 1 ************************************************
 2 * PROGRAMMED BY : Andrew Gharios & Navid Gushti
 3 * CLASS         : CS1A
 4 * SECTION       : MW 8:00a - 10:30a
 5 * LAB #11       : Output - Pocket Money
 6 ************************************************
 7
 8 What is your name?               Jean Cyr
 9 How much is left from last week? 12.50
10 How much have you spent?         23.00
11
12 Hello Jean Cyr
13 You now have $ 9.50 left.
14
15
16 What is your name?               Pete McBride
17 How much is left from last week? 25.15
18 How much have you spent?         32.76
19
20 Hello Pete McBride
21 You now have $ 12.39 left.
22
23
24
25 What is your name?               Chris Carroll
26 How much is left from last week? 5.25
27 How much have you spent?         16.50
28
29 Hello Chris Carroll
30 You now have $ 8.75 left.
```

```cpp
/*****************************************************
* AUTHORS : Andrew Gharios, Navid Gashti
* STUDENT IDs : 1449366 & 1182192
* LAB #11 : Basic Input & Output
* CLASS : CS1A
* SECTION :
* DUE DATE : 3/17/21
*****************************************************/
#include <iostream>
#include <iomanip>
using namespace std;
/*****************************************************************************
* Pocket Money Program
*_____________________________________________________________________________
*
* This program receives the pocket money left over from the previous
* week and the amount spent in the current week from the user an
* calculates how much pocket money is remaining. Each week the user
* is allocated an allowance.
*_____________________________________________________________________________
* INPUT:
* name : The user's name.
* amtLeftover : Amount leftover from the previous week.
* spent : Amount spent this week.
*
* OUTPUT:
* name : User's Name
* pocketMoney : Amount of pocket money remaining
*****************************************************************************/

int main()
{
    /*************************************************************************
     * CONSTANTS
     * -----------------------------------------------------------------------
     * OUTPUT - USED FOR CLASS HEADING
     * -----------------------------------------------------------------------
     * PROGRAMMER     : Programmer's Name
     * CLASS          : Student's Course
     * SECTION        : Class Days and Times
     * LAB_NUM        : Lab Number (specific to this lab)
     * LAB_NAME       : Title of the Lab
     * -----------------------------------------------------------------------
     * WEEKLY_PAY used to create a constant payment of 20 dollars per week.
     * -----------------------------------------------------------------------
     * WEEKLY_PAY     : Weekly payment to user's money.
     * -----------------------------------------------------------------------
     * NAME_SIZE used to save a constant size for namesizes.
     * -----------------------------------------------------------------------
     * NAME_SIZE      : size for name strings.
     * -----------------------------------------------------------------------
     * INPUT_COL is used to store the value for setw when inputting values.
     * -----------------------------------------------------------------------
     * INPUT_COL      : size for input column.
     *************************************************************************/
    const char PROGRAMMER[]      = "Andrew Gharios & Navid Gushti";
    const char CLASS[]           = "CS1A";
    const char SECTION[]         = "MW 8:00a - 10:30a";
    const int  LAB_NUM           = 11;
    const char LAB_NAME[]        = "Output - Pocket Money";

    const int WEEKLY_PAY         = 20;
```

```
 63    const int NAME_SIZE          = 25;
 64    const int INPUT_COL          = 33;
 65
 66
 67    char      name[NAME_SIZE]; // IN & OUT   - Name of the user.
 68    double    amtLeftover;     // IN & CALC  - Amount of money left from user.
 69    double    spent;           // IN & CALC  - Amount of money spent by user.
 70    double    pocketMoney;     // CALC & OUT - User's pocket money at the end.
 71
 72    /*****************************************************************************
 73     * OUTPUT - class heading
 74     *****************************************************************************/
 75    cout << left;
 76    cout << "************************************************\n";
 77    cout << "* PROGRAMMED BY : "  << PROGRAMMER << endl;
 78    cout << "* "      << setw(14) << "CLASS"    << ": " << CLASS    << endl;
 79    cout << "* "      << setw(14) << "SECTION"  << ": " << SECTION  << endl;
 80    cout << "* LAB #" << setw(9)  << LAB_NUM    << ": " << LAB_NAME << endl;
 81    cout << "************************************************\n\n";
 82    cout << right;
 83
 84     /*****************************************************************************
 85     * INPUT: User inputs name, amount of money left over from last week,
 86     *        and amount of money spent.
 87     *****************************************************************************/
 88    // Input name.
 89    cout << left;
 90    cout << setw(INPUT_COL) << "What is your name? ";
 91    cin.getline (name, NAME_SIZE);
 92
 93    // Input amount leftover.
 94    cout << setw(INPUT_COL) << "How much is left from last week? ";
 95    cin  >> amtLeftover;
 96    cin.ignore(10000, '\n');
 97
 98    // Input amount spent.
 99    cout << setw(INPUT_COL) << "How much have you spent? ";
100    cin  >> spent;
101    cin.ignore(10000, '\n');
102    cout << endl;
103    cout << right;
104
105
106     /*****************************************************************************
107     * PROCESSING: Program calculates the pocketmoney left at the end based
108     *             on user's input of previous money and money spent.
109     *****************************************************************************/
110    pocketMoney = (amtLeftover + WEEKLY_PAY) - spent;
111
112     /*********************************** ***********************************
113     * OUTPUT: Outputs user's name, and amount of pocketmoney left at the end.
114     *
115     * Expected Output:
116     ***************************************************************************
117     * PROGRAMMED BY : Andrew Gharios & Navid Gushti
118     * CLASS         : CS1A
119     * SECTION       : MW 8:00a - 10:30a
120     * LAB #11       : Output - Pocket Money
121     ***********************************************
122
123     What is your name?              Jean Cyr
124     How much is left from last week? 12.50
```

```
125     How much have you spent?         23.00
126
127     Hello Jean Cyr
128     You now have $ 9.50 left.
129
130
131     What is your name?               Pete McBride
132     How much is left from last week? 25.15
133     How much have you spent?         32.76
134
135     Hello Pete McBride
136     You now have $ 12.39 left.
137
138
139
140     What is your name?               Chris Carroll
141     How much is left from last week? 5.25
142     How much have you spent?         16.50
143
144     Hello Chris Carroll
145     You now have $ 8.75 left.
146     ********************************************************************/
147    cout << fixed;
148    cout << setprecision(2);
149    cout << "Hello "  << name << endl;
150    cout << "You now have $ " << pocketMoney << " left.";
151    return 0;
152 }
153
```