```
/*****************************************************************************
 * AUTHOR      : Carlos Aguilera
 * STUDENT ID  : 1152562
 * LAB # 1     : Theme Park Day Planner
 * CLASS       : CS1B
 * SECTION     : M-W
 * DUE DATE    : 01.26.22
 *****************************************************************************/

#include <iostream>
#include <iomanip>
#include <string>

/*****************************************************************************
 * Theme Park Day Planner
 * ---------------------------------------------------------------------------
 * This program will output the class heading
 * ---------------------------------------------------------------------------
 * INPUT:
 * name = name of the kid
 * boolDetermination = whether user chose yes or no
 * age = age of kid
 * OUTPUT:
 * totalCost = total cost of the day
 *****************************************************************************/
void foodLogic(double *totalCost, bool isVegetarian, bool eatsCheese, const std::string &name)
{
    if(isVegetarian == false && eatsCheese == true) {//is not vegetarian and eats cheese
        std::cout << "Pack a cheeseburger for " << name << "\n";
        *totalCost += 3.50;
    }
    else if(isVegetarian == false && eatsCheese == false) {//is not vegetarian and doesn't eat cheese
        std::cout << "Pack a hamburger for " << name << "\n";
        *totalCost += 3.25;
    }
    else if(isVegetarian == true && eatsCheese == true) {//is vegetarian and eats cheese
        std::cout << "Pack a cheese pizza for " << name << "\n";
        *totalCost += 2.50;
    }
    else if(isVegetarian == true && eatsCheese == false) {//is vegetarian and doesn't eat cheese
        std::cout << "Pack a Happy Garden meal for " << name << "\n";
        *totalCost += 1.75;
    }
}

void ageLogic(double *totalCost, const int &age, const std::string &name)
{
    if(age > 0 && age < 5)//if age is greater than 0 and less than 5
        std::cout << name << " will be going on the Ferris Wheel and will be visiting the Sheep Petting Zoo.\n";
    else if(age > 4 && age < 13) {//if age is greater than 4 and less than 13
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51          std::cout << name << " will be going on the Tea Cups and will be
    playing Lazer Tag.\n";
52          *totalCost += 15;
53      }else if(age > 12) {//if age is greater than 12
54          std::cout << name << " will be going on the Roller Coaster and the
    Zip line.\n";
55          *totalCost += 20;
56      }else
57          std::cout << "Invalid Age\n";//exception handling if invalid age
58  }
59  int main() {
60     /******************************************************************************
61      * CONSTANTS
62      * ----------------------------------------------------------------------------
63      * OUTPUT - USED FOR CLASS HEADING
64      * ----------------------------------------------------------------------------
65      * PROGRAMMER : Programmer's Name
66      * CLASS      : Student's Course
67      * SECTION    : Class Days and Times
68      * LAB_NUM    : Lab Number (specific to this lab)
69      * LAB_NAME   : Title of the Lab
70      *****************************************************************************/
71    const char PROGRAMMER[] = "Carlos Aguilera";
72    const char CLASS[]      = "CS1B";
73    const char SECTION[]    = "MW: 7:30p - 9:50p";
74    const int LAB_NUM       = 1;
75    const char LAB_NAME[]   = "Theme Park Day Planner";
76
77      std::string name {};
78      char boolDetermination {};
79      int age {};
80      bool isVegetarian {}, eatsCheese {};
81      double totalCost {};
82
83
84    /******************************************************************************
85     * OUTPUT - Class Heading
86     *****************************************************************************/
87    std::cout << std::left;
88    std::cout << "*************************************************\n";
89    std::cout << "*   PROGRAMMED BY : " << PROGRAMMER << std::endl;
90    std::cout << "*   " << std::setw(14) <<"CLASS" << ": " << CLASS <<
    std::endl;
91    std::cout << "*   " << std::setw(14) <<"SECTION" << ": " << SECTION <<
    std::endl;
92    std::cout << "*   LAB #" << std::setw(9) << LAB_NUM << ": " << LAB_NAME <<
    std::endl;
93    std::cout << "*************************************************\n\n";
94    std::cout << std::right;
95
96      for(size_t i {1}; i <= 10; i++)
97      {
98          std::cout << "Kid #:" << i << "\n";
99          std::cout << std::left;
100         if(i != 1)
101             std::cin.ignore(100,'\n');//this is for the buffer but after its
    ran once
102         std::cout << std::setw(27) << "What is your kid's name?";
103         std::getline(std::cin,name);
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104         name = name.substr(0, name.find(" "));//using the substr method to
    cut the string after first name
105         std::cout << std::setw(27) << "How old is the kid? ";
106         std::cin >> age;
107         std::cin.ignore(100,'\n');//an ignore for .get
108         std::cout << std::setw(27) << "Vegetarian (Y/N) ";
109         std::cin.get(boolDetermination);
110 
111         if(boolDetermination == 'Y' || boolDetermination == 'y')
112             isVegetarian = true;
113         else
114             isVegetarian = false;
115 
116         std::cin.ignore(100,'\n');
117         std::cout << std::setw(27) << "Does he/she like cheese? ";
118         std::cin.get(boolDetermination);
119         std::cout << std::right << "\n";
120 
121         if(boolDetermination == 'Y' || boolDetermination == 'y')
122             eatsCheese = true;
123         else
124             eatsCheese = false;
125 
126         ageLogic(&totalCost, age, name);
127         foodLogic(&totalCost, isVegetarian, eatsCheese, name);
128         std::cout << "\n\n";
129     }
130     std::cout << "The total cost of the day is: " << std::fixed <<
    std::setprecision(2) << totalCost << "\n";
131     std::cout << "The average cost per kid is:  " << totalCost/10 << "\n";
132 }
```