

# The Oregon Trail Lite

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## Intro

This program is modeled by the rpg game Oregon Trail but in a text based adventure with a few modifications. The main modification is the inclusion of stats to better portray an RPG. The game follows the theme of the original game by utilizing a countdown system before the game expires. What I have added are my original ideas and text as well as the different quests and complications that arise. In addition, I also added the stats system to influence the outcome of player's decisions in the game.

## Rules

The rules are simple, the objective is to finish The Oregon Trail before running out of food or time. You have the ability to add statistics to your group such as strength, Agility, and Luck which are required to successfully accomplish a task. These abilities reflect the options and choices the player may choose. There are quests along the way which may influence your outcomes. The main goal is to finish the trail with the most food and the quickest that you can. Good Luck!

## Design

The design is where I had trouble especially with only the skills that I knew. Perhaps with more understanding I could of shortened the amount of code and made the program cleaner, however the design of the program still works and provides functionality. Since this is a Text-Based RPG, the most important factor was keeping it readable and clear. Some of the complications arose when I introduced Functions into the linear program. Since the events built off on one another, it was difficult to include functions to place the days. Again, Because of

## Variables:

int	days=35; Number of days in game: The sum of the countdown
short choice;	menu choice
float food=0;	food countdown
int str=0;	strength one of the rpg stats
int agl=0;	agility, another of the rpg stats
int lck=0;	luck, another rpg stat
int ttl=0;	Total: Sum of stats, ensures stats do not go above 5
char dec;	decision, used for quests and decision making in game
bool strt;	Start: true activates the menu, false quits the game
bool moral;	Moral: In game factor which influences a quest
char chA='A';	Character A: Decision A
char chB='B';	Character B: Decision B
char chC='C';	Character C: Decision C

## Research:

Researching included many things ranging from historical data to other programming solutions. For example, some of the research was dedicated to find the estimated time it would take to complete the Oregon Trail. For the matter of not boring the user to death instead of utilizing 154 days and spending countless lines of code I believed 35 days would be a good estimate. Days were easier to utilize in the program rather than having months or weeks which wouldn't make sense utilizing the quest system. Other research focused on how The Oregon Trails game worked and operated. This allowed me to adapt the food and day economy while realizing that my knowledge did not allow me to utilize the financial system just yet.

## Topics Covered:

Some of the Topics include utilizing primitive data types , loops, statements, operators, system libraries, conditionals, menus, functions, arrays, passing values, passing arrays through functions, and. Some of these include shorts, floats, integers, bools, and chars. I utilized do whiles, for loops, and while loops, each for different purposes. I also utilized many conditionals such as if, else, and else if statements. Menus and switch statements were also used throughout my program. Operators as well made a significant part of my code since I used both conditional operators and logic operators.

Functions: `void con();`  
`void displayArray(fstream, int);`

```
int searchList( int[], int, int);
```

```
Arrays: int array [ROWS][COLS];
```

```
    const int size=2;                //Size of the array  
    int search[size]={2123629, 2152573}; //Array for ID
```

```
int array outputs Food and days
```

```
int search allows for ID to be input
```

## Pseudocode:

Initialize

Input Student ID

    if student iD>0 and iD<24 million

        ouput error message and re- enter

Output Menu

case 1: Start game

case 2: Display Rules

    output Rules

case3: End Program

input choice

if strt==true game starts

input strg,agil,lck;

while ttl>5

    ouput error and ask for user to input again

Display quest

input A,B, or C;

if A subtract days and add food

else if B subtract days and add food

    if strg<3

        subtract more days and add food

else if C subtract days and add food

    if lck<3

        subtract more days and food

Display quest

input A,B;

if A subtract days and add food

else if B subtract days and add food

Display quest

```
input A,B, or C;
if A subtract days and add food
else if B subtract days and add food
    if strg<3
        subtract more days and add food
else if C subtract days and add food
    if lck<3
        subtract more days and food
Display New Day
Display quest
input A,B, or C;
if A subtract days and add food
else if B subtract days and add food
Display loss if
    days or food <0
Display New Day
Display quest
input A,B, or C;
if A
    if strg<3
        subtract more days and add food
else if B subtract days and add food
    if strg<3
        subtract more days and add food
else if C subtract days and add food
    if lck<3
        subtract more days and food
Display loss if
    days or food <0
end Program
```

```

/*
 * File:    main.cpp
 * Author:  Kevin Rivas
 *
 * Created on July 25, 2014, 5:09 PM
 */

#include <iostream>
#include <fstream>

using namespace std;

//Global Constants
const int ROWS = 20;
const int COLS = 2;

//Function Prototypes
void con();
void displayArray(fstream, int);
int searchList( int[], int, int);

//Execution Starts here
int main(int argc, char** argv) {
    //Declare Variables
    int days=35;
    short choice;
    int food=0;
    int str=0;
    int agl=0;
    int lck=0;
    int ttl=0;
    char dec;
    bool strt;
    bool moral;
    fstream end;
    char chA='A';
    char chB='B';
    char chC='C';
    int array [ROWS][COLS];

    const int size=2; //Size of the array
    int search[size]={2123629, 2152573}; //Array for ID

    int iD=0; //ID Number
    int result=0; //holds what # the
account is in the element(inside array))

    //Simple Tex output

    cout<<"Enter your Student ID Number"<<endl;
    cin>>iD; //variable for student Id
    result=searchList(search, size, iD); //linear search result

```

```

if(iD<0||iD> 2,147,483,647){

    iD=0;
    result=0;

    cout<<"Error!: Please Input your valid Student
ID"<<endl;
    cin>>iD;
    result=searchList(search, size, iD); //linear search
result
    con();
    cin.ignore();
}

//Simple output of text for Menu
cout<<"Welcome to Oregon Trail Lite Version"<<endl;
cout<<"=====Main Menu===== "<<endl;
cout<<"1. Play game"<<endl;
cout<<"2. Rules"<<endl;
cout<<"3. Quit (But why would you?)"<<endl;

//Input for menu
cin>>choice;

//Do-while menu including switch
do{
    switch(choice)
    {
        case 1:

            strt=true;
            con();
            cin.ignore();
            break;

        case 2:

            cout<<"Rules"<<endl;
            cout<<"The rules are simple, the objective is to
finish the Oregon";
            cout<<" Trail before running out of food or
time."<<endl;
            cout<<"You have the ability to add statistics to
your group such";
            cout<<" such as strength, Agility, and Luck which
are required to";
            cout<<" successfully accomplish a task. There are
quests along the";
            cout<<" way which may influence your outcomes. Good
Luck!"<<endl;

```



```

        cout<<"Exiting out of Program..."<<endl;
        con();
        cin.ignore();
        break;

        case 3:

            strt=false;
            cout<<"Quitting game"<<endl;
            con();
            cin.ignore();
            return 0;
        default:
            if (choice!=1&&choice!=2&&choice!=3)
                cout<<"Not a valid option, please enter 1,2, or 3.
";

                cin>>choice;
                break;
            }
        }
        while (choice<1||choice>3);

        //Uses Bool to activate the Game
        if (strt==true)
        {

            cout<<"Well hello there, Traveler! Welcome to the Oregon
Trail!"<<endl;
            cout<<"Before we begin, please enter your
Statistics."<<endl;
            cout<<"This may help you on your journey!"<<endl;
            cout<<"You only have 5 points to give so please use them
wisely";
            cout<<" (It is recommended to at least dedicate 3 ";
            cout<<" points to at least one stat)."<<endl;
            cout<<"For more information, consult rules"<<endl;

            //Input of Stats
            cout<<"Strength: "<<endl;
            cin>>str;
            cin.ignore();
            cout<<"Agility: "<<endl;
            cin>>agl;
            cin.ignore();
            cout<<"Luck: "<<endl;
            cin>>lck;
            con();
            cin.ignore();
            ttl=str+agl+lck;

            //Input validation statement for the input of Stats
            while (ttl>5)
            {

```

```

        str=0,agl=0,lck=0;
        cout<<"Error!"<<endl;
        cout<<"Please correctly divide 5 integers amongst
the statistics";
        cout<<endl;
        cout<<"Strength: "<<endl;
        cin>>str;
        cin.ignore();
        cout<<"Agility: "<<endl;
        cin>>agl;
        cin.ignore();
        cout<<"Luck: "<<endl;
        cin>>lck;
        cin.ignore();
        ttl=str+agl+lck;
        con();

        cout<<endl;
    }
    //Brief simple output of text for some rules
    cout<<"Remember there is a time limit!"<<endl;
    cout<<"Due to the trip taking about 4-6 Months, the time
limit has";
    cout<<" been reduced to 35 days. ";
    cout<<"If you have not reached the end by 35 days, you
fail."<<endl;
    cout<<"Maybe not at life...but certainly at this
game."<<endl;
    cout<<"Now to begin."<<endl;
    con();

    //Beginning of Game
    //Day 1
    cout<<"Day 1: You must aquire food for this epic
journey."<<endl;
    cout<<"Do you.."<<endl;
    cout<<"[A] Gather supplies?(Sure way to aquire food
although";
    cout<<" lengthy)"<<endl;
    cout<<"[B] Hunt?"<<endl;
    cout<<"[C] Fish?"<<endl;
    cin>>dec;
    //holds the day, used to determine the amount of food
and days
    //at the conclusion
    array [0][0]=1;

    //Choice A
    if(dec=='A')
    {
        food+=20;
    }

```

```

        cout<<"Food Acquired: "<<endl;
        cout<<food<<endl;
        days-=7;
        cout<<"Days left: "<<days<<endl;
    }
    //Choice B
    else if (dec=='B')
    {

        //If strength is successful
        if(str>=3)
        {
            cout<<"Success!";
            food+=20;
            cout<<"Food Acquired:"<<endl;
            cout<<food<<endl;
            days-=3;
            cout<<"Days left: "<<days<<endl;
            con();
            cin.ignore();
        }
        //If strength stat is unsuccessful
        else
        {
            cout<<"Failure: Strength too low"<<endl;
            cout<<"Since you failed at hunting you
resupply"<<endl;
            food+=20;
            cout<<"Food Acquired: "<<endl;
            cout<<food<<endl;
            days-=8;
            cout<<"Days left: "<<days<<endl;
            con();
            cin.ignore();
        }
    }

    //Choice C
    else if (dec=='C')
    {
        //If luck stat is successful
        if(lck>=3)
        {
            cout<<"Success!";
            food+=20;
            cout<<"Food Acquired: "<<endl;
            cout<<food<<endl;
            days-=3;
            cout<<"Days left: "<<days<<endl;
            con();
            cin.ignore();
        }
    }
}

```

```

    }
    //If luck stat is unsuccessful
    else
    {
        food+=20;
        days-=8;
        cout<<"Failure: Luck too low";
        cout<<"Since you failed at fishing. You
resupply";

        cout<<"Food Acquired: "<<food<<endl;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

}

//adds food to the array as the second column
array[0][1]=food;

//Input validation
while (dec!='A'&&dec!='B'&&dec!='C'){
    cout<<"Error, Please Enter A, B, or C: "<<endl;
    cin>>dec;
}

//Day 2
//Adds a day to the array
array [1][0]=2;
//in-game random day
cout<<"New Day... Uneventful"<<endl;
food-=1;
days-=1;
cout<<"Food left: "<<food<<endl;
cout<<"Days left: "<<days<<endl;
con();
cin.ignore();

//Adds food to the array
array [1][1]=food;

//Day 3
array [2][0]=3;
//in-game random day
cout<<"New Day... You pass by a creek"<<endl;
food-=1;
days-=1;
cout<<"Food left: "<<food<<endl;
cout<<"Days left: "<<days<<endl;
con();
cin.ignore();
array [2][1]= food;

```

```

//Day4
array [3][0]=4;
//in-game random day
cout<<"New Day... What's so great about Oregon?"<<endl;
food-=1;
days-=1;
cout<<"Food left: "<<food<<endl;
cout<<"Days left: "<<days<<endl;
con();
cin.ignore();
array[3][1]=food;

//Day5
array[4][0]=5;
//Second Challenge
cout<<"New Day....You come across stranded
pioneers."<<endl;
cout<<"Do you.."<<endl;
cout<<"[A] Invite them to come join you."<<endl;
cout<<"[B] Leave them."<<endl;
//Input
cin>>dec;
//Choice A
if(dec=='A')
{
    cout<<"You have a kind heart,but unfortunately that
comes with a";
    cout<<" price. You spent more time and food by
settling extra";
    cout<<" mouths to feed. Good luck."<<endl;
    food-=3;
    cout<<"Food Acquired: "<<endl;
    cout<<food<<endl;
    days-=2;
    cout<<"Days left: "<<days<<endl;
    moral=true;
    con();
    cin.ignore();

}
//Choice B
else if (dec=='B')
{
    cout<<"That was messed up... but at least you
still have food.";
    cout<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    moral=false;
    con();
    cin.ignore();
}

```

```

    }
    //Asks user for another attempt to input correct char
    else{
        cout<<"Invalid Answer: Please Select the A,or
B"<<endl;
        cin>>dec;
    }
    array [4][1]=food;

    //Day 6
    array [5][0]=6;
    //in-game random day
    cout<<"New Day... Oh look, a tree!"<<endl;
    food-=1;          //subtracts 1 food
    days-=1;          //subtracts 1 day
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
    array [5][1]=food;

    //Day 7
    array [6][0]=7;
    //in-game random day
    cout<<"New Day... Oregon is the one with the gold
right?"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
    array [6][1]=food;

    //Day 8
    array [7][0]=8;
    //in-game random day
    cout<<"New Day... I miss indoor plumbing!"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
    array [7][1]=food;

    //Day 9
    array [8][0]=9;
    //in-game random day
    cout<<"New Day... did we forget someone? Where's
Kevin?!"<<endl;
    food-=1;

```

```

days-=1;
cout<<"Food left: "<<food<<endl;
cout<<"Days left: "<<days<<endl;
con();
cin.ignore();
array [8][1]=food;

//Day 10
array [9][0]=10;
//Third Challenge
cout<<"New Day....Your horse is slowing down."<<endl;
cout<<"Do you.."<<endl;
cout<<"[A] Stop and Rest"<<endl;
cout<<"[B] Eh, the horse is fine."<<endl;
cin>>dec;

//Choice A
if(dec=='A')
{
    cout<<"Yeah we should take a rest for a while...";
    cout<<"I mean why would we risk our only form of
transportation, ";
    cout<<"right? Silly thing to do."<<endl;
    food-=3;
    cout<<"Food Acquired: "<<endl;
    cout<<food<<endl;
    days-=3;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
}

//Choice B
else if (dec=='B')
{
    cout<<"So Good news and Bad news..."<<endl;
    cout<<"Your horse finally collapsed with a broken
ankle..."<<endl;
    cout<<"Good news: You have more food now!
Yum!"<<endl;
    cout<<"You must wait until another caravan passes by
to buy a";
    cout<<" new horse"<<endl;
    cout<<endl;
    food+=5;
    days-=5;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
}

```

```

    }

    //Asks user for another attempt to input correct char
    else
    {
        cout<<"Invalid Answer: Please Select the A,or
B"<<endl;
        cin>>dec;
    }

    //Day 11
    //In-game Random day
    cout<<"New Day... Ah the clean air, away from the
city"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();

    //Day 12
    //In-game Random day
    cout<<"New Day... WHY DID WE LEAVE THE CITY!?"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();

    //Day 13
    //In-game Random day
    cout<<"Your wagon's wheel looks funny..."<<endl;
    cout<<"Do you..."<<endl;
    cout<<"[A] Stop and inspect it?"<<endl;
    cout<<"[B] Psh no! We have to hurry up!"<<endl;
    cin>>dec;

    if(dec=='A')
    {
        cout<<"So it turned out to be nothing...";
        cout<<"You wasted time stopping...";
        cout<<"Look at you trying to be responsible."<<endl;
        food-=3;
        cout<<"Food Acquired: "<<endl;
        cout<<food<<endl;
        days-=3;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

```



```

else if (dec=='B')
{
    cout<<"Well, it broke."<<endl;
    cout<<"Yeah you should of stopped..."<<endl;
    if(moral=true){
        cout<<"Hey remember those pioneers that you
helped out?"<<endl;
        cout<<"Well, turns out they have a
spare!"<<endl;
        cout<<"Good thing you helped them!"<<endl;
        food-=1;
        days-=1;
        cout<<"Food left: "<<food<<endl;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }
    if(moral=false){
        cout<<"Well now you have to wait for another caravan
to pass by";
        cout<<" so they can help you out"<<endl;
        cout<<"Hmm i wonder if those stranded pioneers could
of helped?";
        cout<<endl;
        food+=5;
        days-=5;
        cout<<"Food left: "<<food<<endl;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }
}

else{
    cout<<"Invalid Answer: Please Select the A,or
B"<<endl;
    cin>>dec;
}
array [9][1]=food;

{if (days<=0||food<=0){

    cout<<"Game Over: Ran out of food or time... or
both."<<endl;

    con();
    cin.ignore();
    return 0;}
}

//Day 14

```

```

        array [10][0]=11;
        cout<<"New Day... Oh abandoned Wagon? That's not
ominous..."<<endl;
        food-=1;
        days-=1;
        cout<<"Food left: "<<food<<endl;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
        array [10][1]=food;

        {if (days<=0||food<=0){

                cout<<"Game Over: Ran out of food or time... or
both."<<endl;

                con();
                cin.ignore();
                return 0;}

        }

        //Day 16
        array [11][0]=12;
        cout<<"Maybe it's a good idea to stop to get food?
"<<endl;
        cout<<"Do you..."<<endl;
        cout<<"[A] Nah, We need to hurry, we're running out of
time!"<<endl;
        cout<<" lengthy)"<<endl;
        cout<<"[B] Hunt?"<<endl;
        cout<<"[C] Gather Barries?"<<endl;
        cin>>dec;

        if(dec=='A'){
                cout<<"Sure. Ignore food, you're trying to keep your
figure";
                cout<<" anyways..."<<endl;
                food-=1;
                cout<<"Food Acquired: "<<endl;
                cout<<food<<endl;
                days-=1;
                cout<<"Days left: "<<days<<endl;

        }
        else if (dec=='B'){

                if(str>=3){
                        cout<<"Success!";
                        food+=15;
                        cout<<"Food Acquired:"<<endl;

```

```

        cout<<food<<endl;
        days-=3;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

    else{
        cout<<"Failure: Strength too low"<<endl;
        cout<<"Took you a while to finally catch
Bambi..."<<endl;
        food+=15;
        cout<<"Food Acquired: "<<endl;
        cout<<food<<endl;
        days-=5;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

}

else if (dec=='C'){

    if(lck>=3){
        cout<<"Success!";
        food+=15;
        cout<<"Food Acquired: "<<endl;
        cout<<food<<endl;
        days-=3;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }
    else{
        food+=10;
        days-=8;
        cout<<"Failure: Luck too low";
        cout<<"THOSE WERE POISONOUS BERRYS! You must
wait a while to";
        cout<<" recover!"<<endl;
        cout<<"Food Acquired: "<<endl;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

}

else{

```

```

        cout<<"Invalid Answer: Please Select the A,B,or
C"<<endl;
        cin>>dec;
    }
    array [11][1]=food;

    {if (days<=0||food<=0){
        cout<<"Game Over: Ran out of food or time... or
both."<<endl;

        con();
        cin.ignore();
        return 0;}
    }

    //Day 17
    array [12][0]=13;
    cout<<"New Day... Boring day"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
    array [12][1]=food;

    {if (days<=0||food<=0){
        cout<<"Game Over: Ran out of food or time... or
both."<<endl;

        con();
        cin.ignore();
        return 0;}
    }

    //Day 18
    array [13][0]=14;
    cout<<"New Day... Uneventful"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
    array [14][4]=food;

    {if (days<=0||food<=0){
        cout<<"Game Over: Ran out of food or time... or
both."<<endl;

        con();
        cin.ignore();
        return 0;}
    }

```

```

    }
    //Day 19
    array [15][0]=16;
    cout<<"New Day... Almost there!"<<endl;
    food-=1;
    days-=1;
    cout<<"Food left: "<<food<<endl;
    cout<<"Days left: "<<days<<endl;
    con();
    cin.ignore();
    array [15][4]=food;

    {if (days<=0||food<=0){
        cout<<"Game Over: Ran out of food or time... or
both."<<endl;

        con();
        cin.ignore();
        return 0;}
    }

    array [16][0]=17;
    //Day20
    cout<<"You're near the border but you see a group of
people up ahead";
    cout<<". They look like unsavory characters..."<<endl;
    cout<<"Do you.."<<endl;
    cout<<"[A] Go talk to them... what's the worst that can
happen?"<<endl;
    cout<<"[B] Fight them! Why? Because Bear Grylls told me
so!"<<endl;
    cout<<"[C] Speed the Wagon Past them. I know I'm
Faster!"<<endl;
    cin>>dec;

    if(dec=='A'){
        if(lck>=3){

            cout<<"Turns out they were government agents
selling plots of";
            cout<<" land";
            cout<<". You buy one immediately for
cheap."<<endl;
            food-=1;
            cout<<"Food left: "<<endl;
            cout<<food<<endl;
            days-=1;
            cout<<"Days left: "<<days<<endl;
        }

        else {
            cout<<"Well, they weren't friendly. They took
your food";

```

```

        cout<<" and kept you tied up for a
while!"<<endl;
        food-=1;
        cout<<"Food left: "<<endl;
        cout<<food<<endl;
        days-=5;
        cout<<"Days left: "<<days<<endl;

    }
}

else if(dec=='B') {

    if(str>=3){
        cout<<"After going Bruce Lee on those bandits you
go on your ";
        cout<<"merry way with extra food!"<<endl;
        food+=5;
        cout<<"Food Acquired:"<<endl;
        cout<<food<<endl;
        days-=1;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

    else{
        cout<<"Failure: Strength too low"<<endl;
        cout<<"As you heroically charged at them you ran
into a tree ";
        cout<<"branch... then they robbed you. the
bandits not the ";
        cout<<"tree..."<<endl;
        food-=5;
        cout<<"Food left: "<<endl;
        cout<<food<<endl;
        days-=5;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }
}

else if (dec=='C'){

    if(ag1>=3){

        cout<<"You knew someday those wagon races would
pay off";
        cout<<" eventually! You rode so hard you made up
for";
    }
}

```

```

        cout<<" two days!"<<endl;
        food-=1;
        cout<<"Food left: "<<endl;
        cout<<food<<endl;
        days+=2;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }
    else{
        food-=5;
        days-=5;
        cout<<"Failure: Agility too low"<<endl;
        cout<<"Cut back on the snickers... you thought
you were";
        cout<<" racing past the bandits... but your
wagon got";

        cout<<" stuck in the mud!"<<endl;
        cout<<"Food left: "<<food<<endl;
        cout<<"Days left: "<<days<<endl;
        con();
        cin.ignore();
    }

}

else{
    cout<<"Invalid Answer: Please Select the A,B,or
C"<<endl;
    cin>>dec;
}

array [17][1]=food;

{if (days<=0||food<=0){
    cout<<"Game Over: Ran out of food or time... or
both."<<endl;

    con();
    cin.ignore();
    return 0;}
}

array [18][0]=19;
cout<<"New Day... You see the finish line!"<<endl;
food-=1;
days-=1;
cout<<"Food left: "<<food<<endl;
cout<<"Days left: "<<days<<endl;
con();
cin.ignore();
array [18][1]=food;

```

```

        {
            if (days<=0||food<=0)
            {
                cout<<"You were so close! Almost there. Too
bad..."<<endl;
                cout<<"Game Over: Ran out of food or time... or
both."<<endl;

                con();
                cin.ignore();
                return 0;
            }
        }

        array [19][0]=20;
        cout<<"Congrats! You finally made it to your new
homestead!"<<endl;
        cout<<"After tiresome journey you finally made
it!"<<endl;
        cout<<"Now build your homestead and avoid getting eaten
by a bear"<<endl;
        cout<<"WINNER: GAME OVER :WINNER"<<endl;
        if(food>=10)
            cout<<"Looks like you have a surplus off
food!"<<endl;
        if (food<10)
            cout<<"Winter is coming. Good luck on the
food"<<endl;
        array [19][1]=food;

        cout<<"Days and Food History: "<<endl;

        //Prints The amount of Days and food
        for(int i=0;i<20;i++)
        {
            for(int j=0;j<2;j++)
            {
                cout<<array[i][j]<<" ";
            }
            cout<<endl;
        }
    }

    return 0;
}

void con(){
    cout<<"Press enter to continue..."<<endl;
    cin.ignore();
}

int searchList(int search[], int size, int iD)

```



```
{
    int i=0; // sub to search array
    int location=-1; // records the value
    bool lost= false; // value is found
    while (i<size&&!lost)
    {
        if (search[i]==iD) //if value is found
        {
            lost=true; //Set to true
            location=i; //records subscript
        }
        i++; //increments element
    }
    return location; //returns the position
}
```