Jesse Mayer
Greg Pouquette

Lab 6

Part A:

#1.

a. Declare void function FindMin (a[], int size);
b. Create for loop with int i that goes to the size of the array and increments i
c. If the declared min=a[0] is less than a[i], assign a[i] as the new min
d. Inside the main, declare int Min=a[0]; and int size
e. Input the size
f. Create a for loop that has the user input numbers until they hit the size they entered
g. Call the function and the cout the Min

#2. C++ code

```
#include <iostream>

using namespace std;

double FindMin(double a[],int size){
double Min=a[0];
for (int i=0;i<size;i++){
   if (a[i]<Min){
      Min=a[i];
   }
}
return Min;
}


int main()
{
double a[]={5,2,3,4,1};
int size=5;

cout<<"Minimum value in array is: "<<FindMin(a,size)<<endl;

   return 0;
}
```

#3.

a. Declare and define bool isFact (int n) which is already given
b. Declare and define function void factarr (int a[], bool fact [], int size)
c. The function should call the other function bool fact inside a for loop
d. Inside the main, declare your array with some factorials and some not factorials
e. Declare int size
f. Call factarr (a, fact, size)
g. Create a for loop for outputting fact [i]

#4. C++ code

```
#include <iostream>

using namespace std;

bool isfact(int n){
   bool is=false;
   int fact=1;
   for (int i=1;i<n+2;i++){
      if (fact==n)
         is=true;
      fact=fact*i;

   }
   return is;
}

void factarr(int a[], bool fact[], int size){
   for(int i=0;i<size;i++){
     fact[i]=isfact(a[i]);
   }
}
int main()
{
int a[5]={120,24,15,6,3};
int size=5;
bool fact[5];

factarr(a,fact,5);
for(int i=0;i<size;i++){
```

```
    cout<<"fact index :"<<i<<" is "<<fact[i]<<endl;
}
    return 0;
}
```

Part B:

```
#include <iostream>
#include <string>
#include <cstdlib>
#include <ctime>
using namespace std;




int main()
{
string spanish[] = {"gato", "perro", "uno", "dos", "tres"};
string english []= {"cat", "dog", "one", "two", "three"};
int score[]= {0,0,0,0,0};

string input;
string answer;
srand(time(0));

int correct = 0;
while (correct<10){
        int index = rand()%5;
        if (score[index]<2){
            cout<<"What is the English of"<<spanish[index]<<endl;
            cin>>input;
            answer = input;
            if (answer == english[index]){
                correct=correct+1;
                score[index] = score[index]+1;
            }
```

```
            else{
                cout<<"The right answer is: "<<english[index]<<endl;
            }
}
}
    return 0;
}
```