**LAB EXERCISE**

1. a) int empNums[100];
   b) float payRates[25];
   c) long miles[14];
   d) string cityName[27];
   e) double lightYears[1000];

2. int reading[-1]; - size declator don't have negative value
   float measurements[4.5]; - size declator must be integer
   int size; - no size declator
   string names[size]; - no size definition

3. 4

4. Size declator – used in defining an array to indicate the number of elements
   Subscript – used to access a specific element in an array

5. Determine whether all array references in a program are within their declared ranges. C++ doesn't perform it.

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7. #include <iostream>
   Using namespace std;

   int main();
   {
   const int NUM_FISH = 20;
   int fish[NUM_FISH];

   cout<< "enter the number of fish caught by the fishermans";
   cin>> fish[0];
   cin>> fish[1];
   cin>> fish[2];
   cin>> fish[3];
   cin>> fish[4];
   cin>> fish[5];

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cin>> fish[6];
cin>> fish[7];
cin>> fish[8];
cin>> fish[9];
cin>> fish[10];
cin>> fish[11];
cin>> fish[12];
cin>> fish[13];
cin>> fish[14];
cin>> fish[15];
cin>> fish[16];
cin>> fish[17];
cin>> fish[18];
cin>> fish[19];

cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[0]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[1]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[2]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[3]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[4]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[5]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[6]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[7]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[8]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[9]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[10]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[11]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[12]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[13]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[14]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[15]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[16]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[17]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[18]\n;
cout<< “the fish caught by fisherman 1 is” << “ ”<< fish[19]endl;


return 0;

}
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8. a) int ages[10] = {5,7,9,14,15,17,18,19,21,23};
   b) float temps[7] = {14.70,16.30,18.43,21.09,17.90,18.76,26,70};
   c) char alpha[9] = {‘J’,’B’,’L’,Á’,’*’,’S’,’H’,’M’,\0};