Week 4 Exercises

2.)

//define an enum type birdType, with the values PEACOCK, SPARROW, CANARY, PARROT, PENGUIN, OSTRICH, EAGLE, CARDINAL, and HUMMINGBIRD

//declare a variable bird of the type birdType.

//assign CANARY to the variable bird.

//advance bird to the next value in the list.

//decrement bird to the previous value in the list.

//output the value of the variable bird.

//input value in the variable bird

#include <iostream>

#include <string>

using namespace std;

enum birdType {PEACOCK, SPARROW, CANARY, PARROT, PENGUIN, OSTRICH, EAGLE, CARDINAL, HUMMINGBIRD} bird;

void birdOutput(enum birdType);

void birdInput(enum birdType);

int main()

{

bird = CANARY;

bird = static\_cast<birdType>(static\_cast<int> (bird) + 1);

bird = static\_cast<birdType>(static\_cast<int> (bird) - 1);

cout << "Bird is currently: " << endl;

birdOutput(bird);

cout << "What is the preferred bird?" << endl;

birdInput(bird);

cout << "Bird is currently: " << endl;

birdOutput(bird);

return 0;

}

void birdOutput(enum birdType)

{

switch (bird)

{

case PEACOCK:

cout << "Peacock" << endl;

break;

case SPARROW:

cout << "Sparrow" << endl;

break;

case CANARY:

cout << "Canary" << endl;

break;

case PARROT:

cout << "Parrot" << endl;

break;

case PENGUIN:

cout << "Penguin" << endl;

break;

case OSTRICH:

cout << "Ostrich" << endl;

break;

case EAGLE:

cout << "Eagle" << endl;

break;

case CARDINAL:

cout << "Cardinal" << endl;

break;

case HUMMINGBIRD:

cout << "Hummingbird" << endl;

break;

}

}

void birdInput(enum birdType)

{

string birdInput;

cin >> birdInput;

if (birdInput == "Peacock")

bird = PEACOCK;

else if (birdInput == "Sparrow")

bird = SPARROW;

else if (birdInput == "Canary")

bird = CANARY;

else if (birdInput == "Parrot")

bird = PARROT;

else if (birdInput == "Penguin")

bird = PENGUIN;

else if (birdInput == "Ostrich")

bird = OSTRICH;

else if (birdInput == "Eagle")

bird = EAGLE;

else if (birdInput == "Cardinal")

bird = CARDINAL;

else if (birdInput == "Hummingbird")

bird = HUMMINGBIRD;

else

cout << "Bird not recognized" << endl;

}

4.) a.) 4

b.) GRAPE; 3

c.) MANGO; 5

d.) True; 1

e.) No output

6.) switch (bird)

{

case PEACOCK:

cout << "Peacock" << endl;

break;

case SPARROW:

cout << "Sparrow" << endl;

break;

case CANARY:

cout << "Canary" << endl;

break;

case PARROT:

cout << "Parrot" << endl;

break;

case PENGUIN:

cout << "Penguin" << endl;

break;

case OSTRICH:

cout << "Ostrich" << endl;

break;

case EAGLE:

cout << "Eagle" << endl;

break;

case CARDINAL:

cout << "Cardinal" << endl;

break;

case HUMMINGBIRD:

cout << "Hummingbird" << endl;

break;

}

8.) enum triangleType {EQUILATERAL, RIGHT, ISOSCELES, SCALENE} triangle;

12.) Only using namespace std; was used and using namespace mySpace; was not used. Meaning when the program calls the int a and RATE in the cout, then it will not be recognized.