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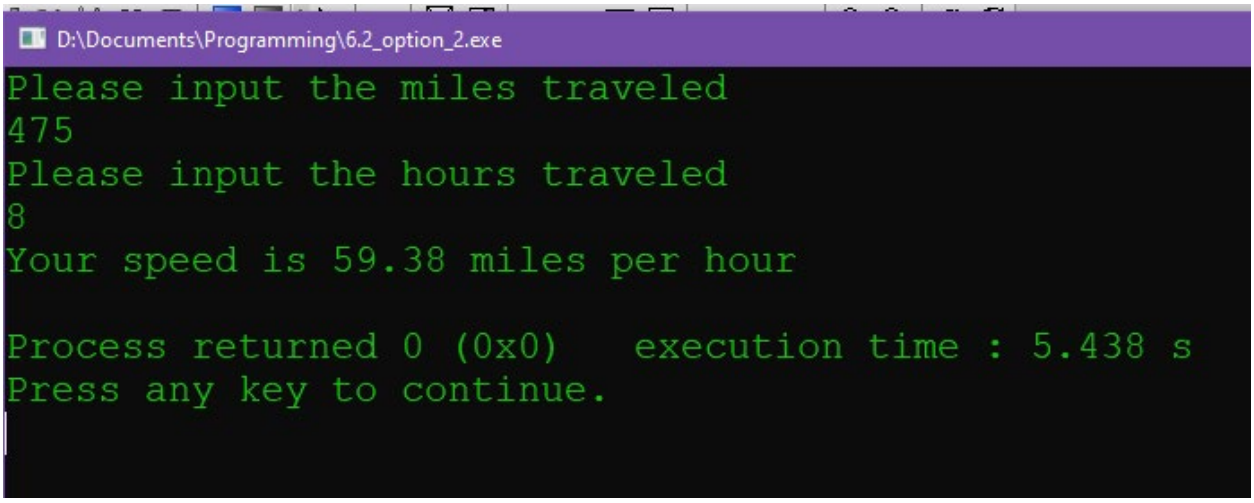
Lab 6 part 2

6.4

Option 2

-The 2 input variables are pass by reference the output value is pass by value



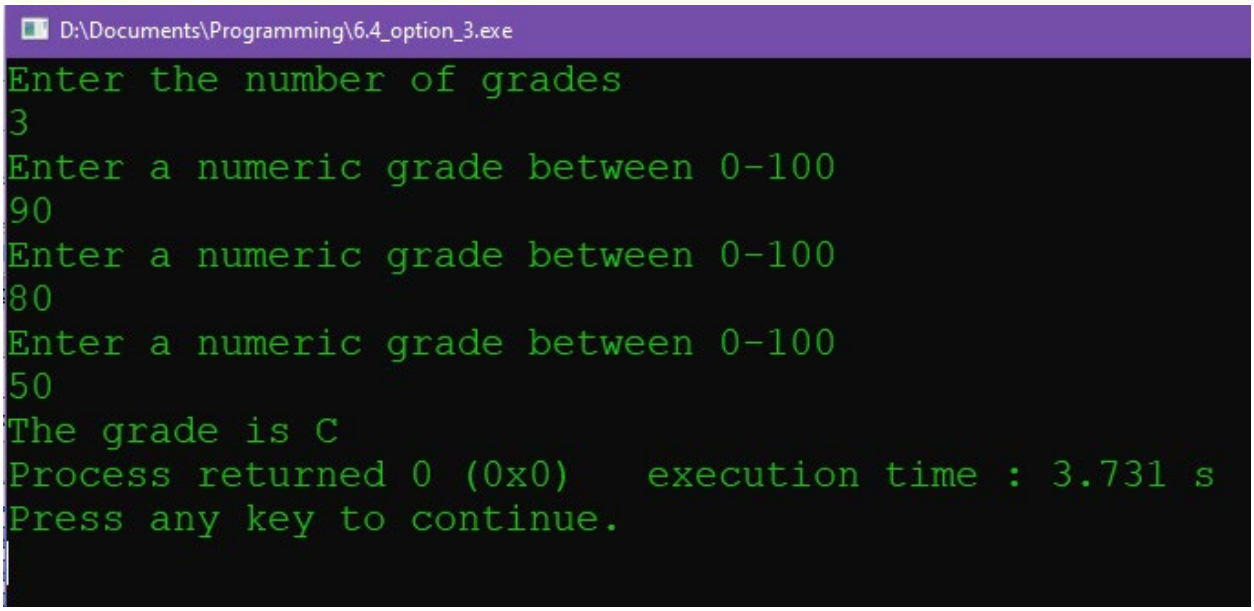
Source Code

```
#include <iostream>

#include <iomanip>


using namespace std;

float find_mph();


float find_mph(float miles, float hours)

{
```

```
    float mph=miles/hours;
//define and calculate

    return mph;

}

int main()
{
    float miles;
    float hours;
    float mph;
    cout<< "Please input the miles traveled"<<endl;
    cin>>miles;
    cout<< "Please input the hours traveled"<<endl;
    cin>>hours;
    mph=find_mph(miles,hours);
//return

    cout<< "Your speed is "<<fixed<<setprecision(2)<<mph<<" miles per hour"<<endl;


    return 0;
```

}

Option 3



Source Code

```
#include <iostream>

#include <iomanip>

using namespace std;


float calc_grade();


float calc_grade(int num_grades,float grade_total)

{

   float final_average;

   //define
```

```
    final_average=grade_total/num_grades;
    //get average
    return final_average;
}
int main()
{
    int num_grades=0;
    int sum_grades=0;
    char letter_grade;
    float final_average=0;
    //define
    cout<<"Enter the number of grades"<<endl;
    cin>>num_grades;
    for (int i=0; i<num_grades; i++)
        //get input of grades
    {
        int temp=0;
        cout<<"Enter a numeric grade between 0-100"<<endl;


        cin>>temp;
        sum_grades+=temp;
    }
    final_average=calc_grade(num_grades,sum_grades);
```

```
//get letter grade


if ((final_average<=100)&&(final_average>=90))
{
   letter_grade='A';
}
else  if ((final_average<=89)&&(final_average>=80))
{
   letter_grade='B';
}
else  if ((final_average<=79)&&(final_average>=70))
{
   letter_grade='C';
}
else  if ((final_average<=69)&&(final_average>=60))
{
   letter_grade='D';
}
else  if ((final_average<=59)&&(final_average>=0))
{
   letter_grade='F';
}
else
```

```
    {
        letter_grade='X';
        //if grade is outside of range give it X as error
    }

    cout<<"The grade is "<<letter_grade;

    return 0;
}
```