

Programming Fundamental - ENSF 337

Lab 2

M. Moussavi

Jay Chuang

B01

September 21, 2019

Lab2exe D2.c

ENSF Fall 2019 Lab 2 Exercise D2

Run #	Your Inputs	What is the value of n	What is the value of i	What is the value d
1	12 0.56	2	12	0.560000
2	5.12 9.56	2	5	0.120000
3	12 ab	1	12	1234.500000
4	ab 12	0	333	1234.500000
5	5ab 9.56	1	5	1234.500000
6	13 67	2	13	67.00000

```
/*  
*  
* lab2exe_F.c  
* ENSF 337 - Lab 2 - Exercise F  
*  
* Completed by: Jay Chuang  
* Lab Section: B01  
*  
*  
*/
```

```
#include<stdio.h>
```

```
void get_user_input(double* distance, double* speed);
```

```
/*  
* REQUIRES  
*   Reads user input, distance in km, and vehicles speed in km/h  
* PROMISES  
*   Returns nothing  
*/
```

```
void travel_time_hours_and_minutes(double distance, double speed, double *hours, double *minutes);
```

```
/*  
* REQUIRES  
*   Receives the user inputs (distance and speed), and calculates the  
*   travel time in hours and minutes.  
* PROMISES  
*   Returns nothing  
*/
```

```
void display_info( double distance, double speed, double hours, double minutes);
```

```
/*
```

```
 * REQUIRES
```

```
 *   To display the distance that was traveled, followed by the
```

```
 *   speed of vehicle, and then the travel time in( hours and minutes)
```

```
 * PROMISES
```

```
 *   Returns nothing
```

```
*/
```

```
int main(void)
```

```
{
```

```
    double distance, speed, hours, minutes;
```

```
    get_user_input(&distance, &speed);
```

```
    travel_time_hours_and_minutes(distance, speed, &hours, &minutes);
```

```
    display_info(distance, speed, hours, minutes);
```

```
}
```

```
void get_user_input(double *distance, double *speed)
```

```
{
```

```
    printf("Please enter the travel distance in km:");
```

```
    scanf("%lf",&*distance);
```

```
    printf("Now enter the vehicle's average speed (km/hr):");
```

```
    scanf("%lf",&*speed);
```

```
}
```

```

void travel_time_hours_and_minutes(double distance, double speed, double *hours, double *minutes)
{
    double time;

    double h = 0;

    time = distance/speed;

    while(time>=1)
    {
        time -= 1;
        h += 1;
    }

    time *= 60;

    *minutes = time;

    *hours = h;
}

```

```

void display_info( double distance, double speed, double hours, double minutes)
{
    printf("\nYou have travelled %lf km with a speed of %lf km/h in %lf hour(s) and %lf
minutes(s)",distance, speed, hours, minutes);
}

```

OUTPUT

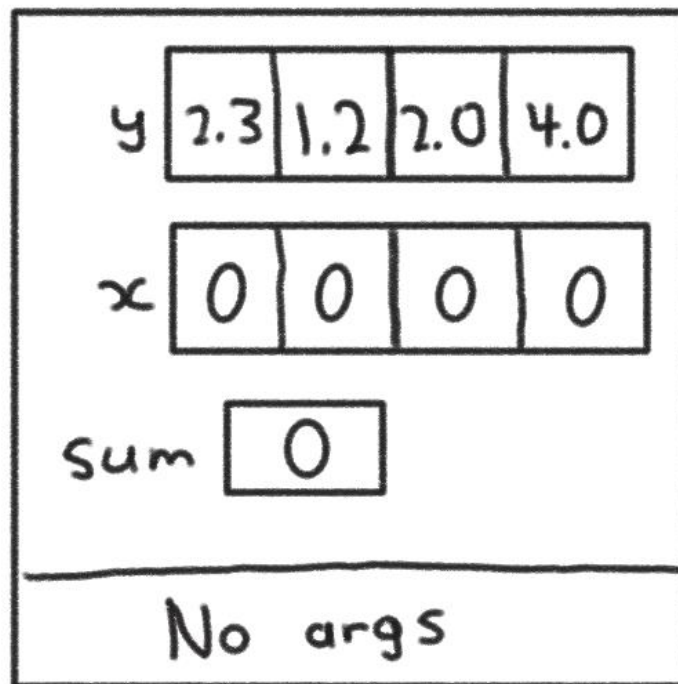
Please enter the travel distance in km:Now enter the vehicle's average speed (km/hr):

You have travelled 5.440000 km with a speed of 76.500000 km/h in 0.000000 hour(s) and 4.266667 minutes(s)

Point 1

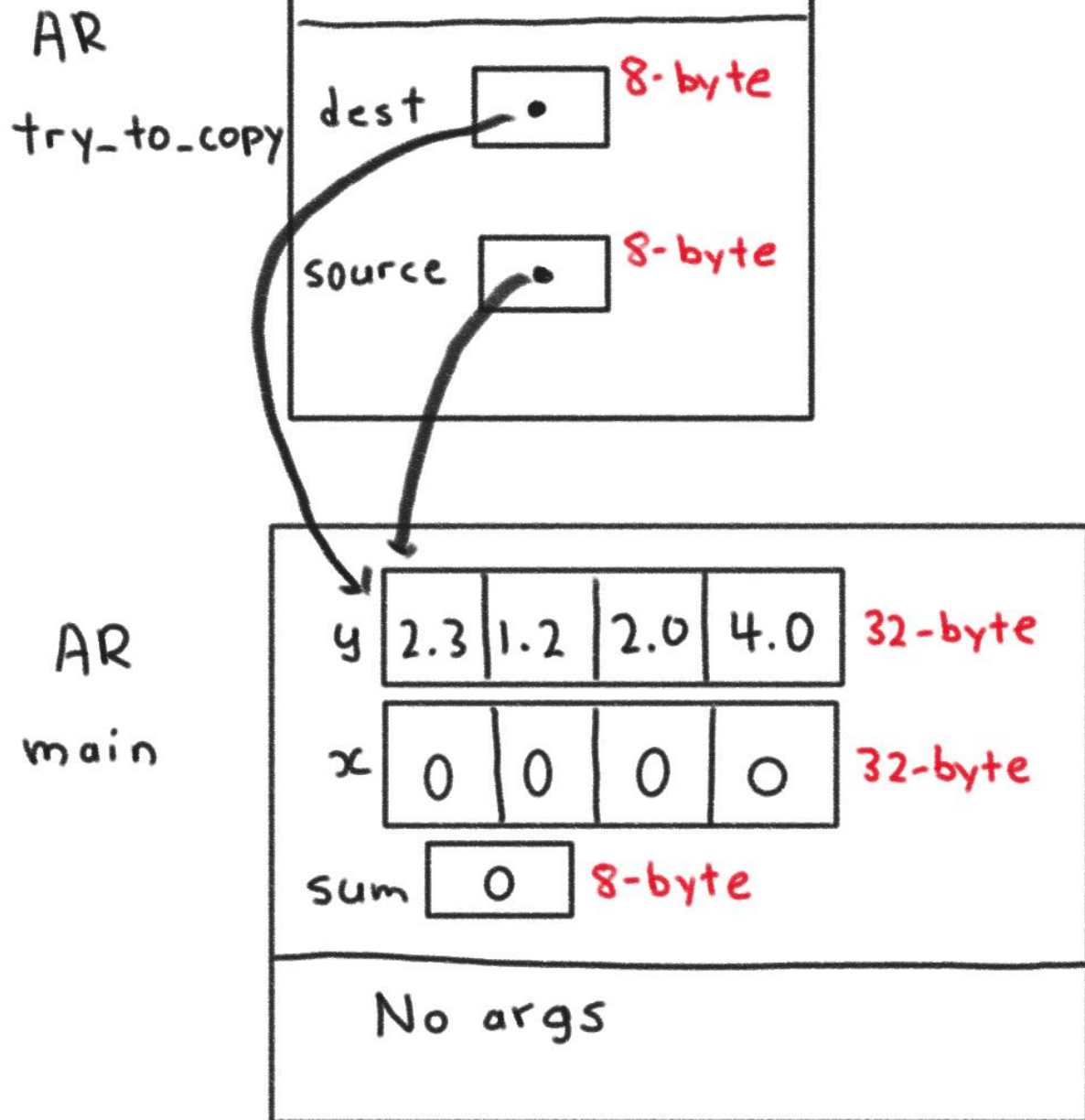
Stack

AR
main



Point 2

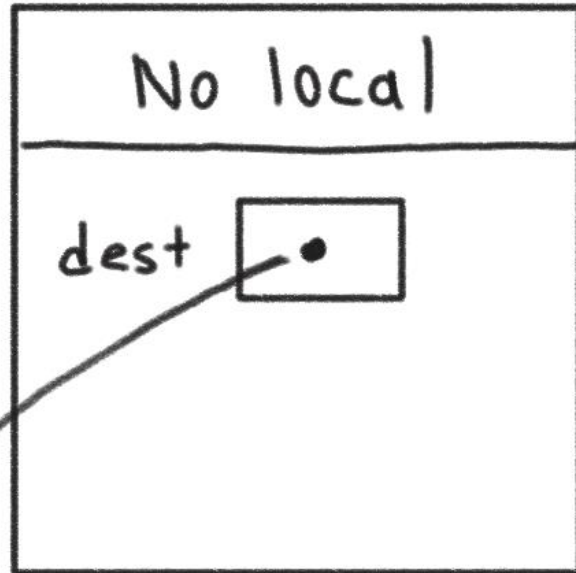
Stack



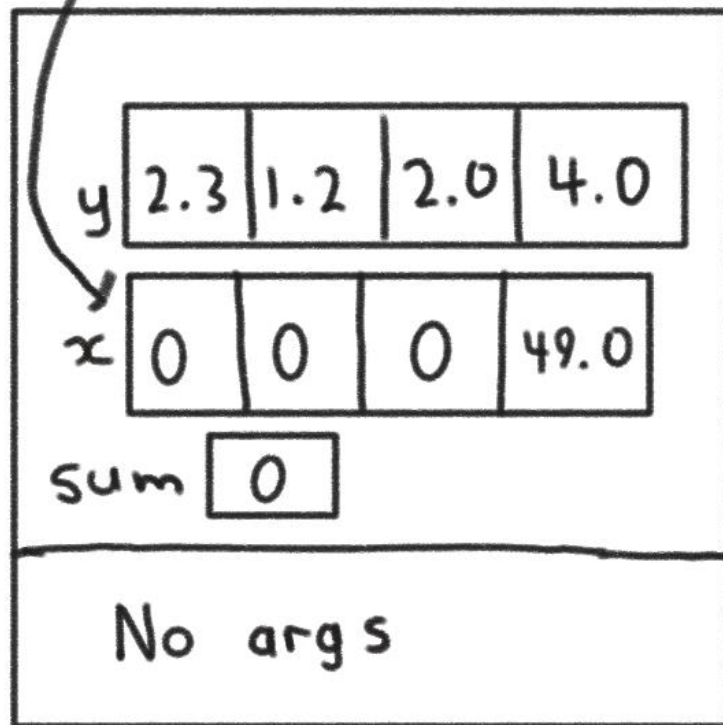
Point 3

Stack

AR
try-to-change



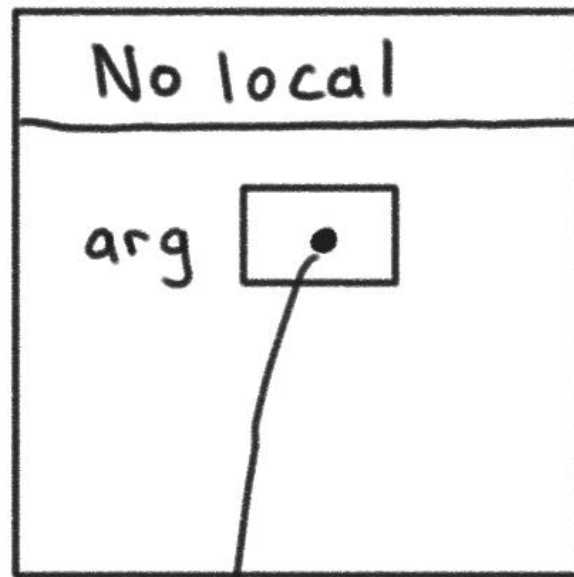
AR
main



Point 4

Stack

AR
add_them



AR
main

