

CH2EXSV

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Chapter 2 Exercises

Algorithm Workbench #2

Enter favorite color and assign the input to variable named color:

variable=expression (=) is the assignment operator

```
[14]: color=input('Enter favorite color')
```

Enter favorite color red

Programming Exercise #7

Calculate MPG by miles driven divided by gallons of gas used and display

First get number miles driven

```
[23]: miles_driven=float(input("Enter number of miles driven:"))
      # Next value assigned for number of gallons used
      gallons_used=float(input("Enter number of gallons used:"))
      # Now calculate the MPG (Miles per gallon)
      MPG = miles_driven / gallons_used
      # Now we can use the print function to display our results
      print("The miles per gallon (MPG) is:", MPG)
```

Enter number of miles driven: 10

Enter number of gallons used: 2

The miles per gallon (MPG) is: 5.0

Programming Exercise #13

Planting Grapevines $V=(R-2E)/S$

First we start with assigning the value to R (the length of the row in feet)

```
[62]: R=int(input("Enter length of the row in feet:"))
      # Now we want to assign the value to the next variable which is E (space used
      ↳by end post assemblies)
      E=int(input("Enter space used by the end post assemblies in feet:"))
      # Next we want to assign the value to the next variable which is S (space
      ↳between vines)
```

```
S=int(input("Enter space between vines in feet:"))  
# Now we can put it all together in the function we were given above  
V= (R-(2 * E)/S)  
# Now we can display our results using the print function  
print("The number of vines per row:", V)
```

Enter length of the row in feet: 15

Enter space used by the end post assemblies in feet: 4

Enter space between vines in feet: 2

The number of vines per row: 11.0

[]: