Solution to Exercises in L#8

Solution to Exercise on Slide 15

What is the result of:

- 2/3
- 2.0/3
- 2.0/3.0

1st one assigned to an int: 0

2nd one assigned to a float: 0.666667

3rd one assigned to a float: 0.666667

Solution to Exercise on Slide 17

- What is the result of 2/5 and 2%5?
- What is the result of 5/2 and 5%2?

2/5 evaluates to 0

2%5 evaluates to 2

5/2 evaluates to 2

5%2 evaluates to 1

Solution to Exercise on Slide 24

- What is the result of? (Assume int x =3)

  x *= 2; → 6

  x /= 4; → 0

  x %= 4; → 3

  x += 9; →12

Solution to Exercise on Slide 30

What is the output of the printf()?

```
int b;
b =20;
printf("value of b: %2d\n", b); → 20
printf("value of b++: %2d\n", b++); → 20
printf("value of b: %2d\n", b); → 21
```

Solution to Exercise on Slide 36

What is the output of printf()?

```
int b;
b = 20;
printf(“ value of b: %2d\n”, b); → 20
printf(“value of ++b: %2d\n”, ++b); → 21
printf(“value of b : %2d\n”, b); → 21
```

Solution to Exercise on Slide 39

What is the output of the printf()?

```
int b;
b =7;
printf("value of +b: %d\n", +b); → 7
printf("value of -b: %2d\n", -b); → -7
printf("value of b: %2d\n", b); →7
```

Solution to Review Questions on Slide 40

- What is the output of each printf() statement in the program?

```
#include <stdio.h>
void main(void)
{
  int a=3;
  int b=7;
  float c=6.0;
  printf("%d\n", a/b); → 0
  printf("%f\n", a/c);  →0.500000
  printf("%d\n", b/a); →2
  printf("%f\n", c/a);  →2.000000
  printf("%d\n", a%b+a); →6
  printf("%f\n", a%c); →compilation error!
  printf("%d\n", b%a); →1
  b=a++; →b=a; a=a+1;
  printf("%d\n", b); →3
  printf("%d\n", a); →4
  printf("%d\n", a--);→4
}
```