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X52.9008 – 01

Tues 6:30-9:00PM

June 1, 2010

HW # 2 --Chapter 4 #2-5

2. Which of the following are invalid variable names? Why?

Int - valid char - invalid 🡪 reserved word in C

6\_05 – invalid 🡪 variable names cannot start with a number

Calloc - valid Xx - valid alpha\_beta\_routine - valid

floating - valid \_1312 - valid z - valid

ReInitialize - valid \_ - valid A$ - invalid 🡪 $ is not a valid character

3. Which of the following are invalid constants? Why?

123.456 - valid 0x10.5 - invalid 🡪 mixing decimal and octal notation

0X0G1 – invalid 🡪 G not a valid character in hexadecimal

0001 - valid 0xFFFF - valid 123L - valid

0Xab05 - valid 0L - valid -597.25 - valid

123.5e2 .0001 - valid +12 - valid

98.6F – invalid 🡪 F not a valid character in decimal

98.7U - valid

17777s – invalid 🡪 s not valid character in decimal

0996 - valid -12E-12 - valid 07777 - valid

1234uL - valid 1.2Fe-7 15,000 – invalid 🡪 ‘,’ not allowed

1.234L - valid 197u - valid 100U - valid

0XABCDEFL - valid 0xabcu - valid +123 - valid

4. Write a program that converts 27° from degrees Fahrenheit (F) to degrees Celsius (C) using the following formula:

C = (F - 32) / 1.8

/\*This program is intended to convert Celsius to Fahrenheit\*/

#include<stdio.h>

int main (void)

{

float c;

float f = 27.0;

c = (f - 32) / 1.8;

printf("%f degrees Fahrenheit is equivalent to %f degrees Celcius\n", f, c);

return 0;

}

5. What output would you expect from the following program?

#include <stdio.h>

int main (void)

{

char c, d;

c = ‘d’;

d = c;

printf (“d = %c\n”, d);

return 0;

}

Output: d= d