EE 1910

Dr. Johnson

Homework 8

1 – Identify the error in each function declaration. 20pts

void ave(char s, char t);	none
void wed(sat int, sun int);	type and variable backwards
foo2(char tire, float steer);	no return type
int fun1(int s, t);	no type for t
int foo(float black, char white)	no ;

2 – Identify the error in each function call. 20pts

fun2((char) a, b);	none
ave(float red, blue);	no type in the actual parameters
fri(mon , tue)	no ;
int foo(a, b);	no type in a call
tire(tires steer);	no ,

3 – Identify the error in each function definition. 20pts

```
int foo(float x, int y){
   x = x + y;
   return x;
}
```

OK - wrong type for return
but it gets converted

```
void foo(int x){
   int y;
   …
   return y;
}
```

fn is void – cannot return int

```
int foo(int x, int y){
   z = x + y;
   return z;
}
```

z never declared

4 – Evaluate each of the following. 10pts

fabs(-2.4)	2.4
floor(-6.3)	-7
ceil(-19.99)	-19
floor(pow(3.2, 2))	floor(3.2^2) = floor(10.24)=10
pow(floor(4.3), ceil(4.3))	4^5 = 1024

5 – Given the following program. What will be printed out for the answer if the user enters 41 as the input? 30pts

```
/*
 * hw6_1.c
 */
#include <stdio.h>

int fun1(int a);
int fun2(int a);
int fun3(int a);

int main(void){
    int a;
    int b;

    printf("Enter an integer: ");
    scanf("%d", &a);

    b = fun1(a);
    printf("answer is: %d",b);

    return 0;
}

int fun1(int b){
    int c;
    c = fun2(b) + fun3(b);
    return c;
}
```

```
int fun2(int d){
    return(d % 10);
}

int fun3(int e){
    int f;
    f = e/10;
    f = f % 10;
    return f;
}
```

main calls fun1(41)
fun1 calls fun2(41) and fun3(41)
fun2(41) returns 41%10 = 1
fun3(41) returns 4.1 → 4 %10 = 4
fun1 adds the two and returns 5
main prints 5

5