

1. Given the following C code:

```
float freezingPoint(char scale) {
    if (scale == 'F') { return 32.0; }
    if (scale == 'C') { return 0.0; }
    if (scale == 'K') { return 273.0; }
    return -1.0;
}
```

Identify the:

- a) Return Type: _____
- b) Function Name: _____
- c) Arguments: _____
- d) Embodiment: _____

2. Given the following C code:

```
#include <stdio.h>
int add(int x,int y) { return x+y; }
int sub(int x,int y) { return x-y; }

int main() {
    int a=3; int b=7; int c;
    c = sub(add(a,b),sub(b,a));
    printf("c is %d\n",c);
    return 0;
}
```

What will get printed?

3. Given the following C code:

```
#include <stdio.h>
int main(int argc, char **argv) {
    int i;
    for (i=0; i<argc; i++) {
        printf("argv[%d]=%s\n",i,argv[i]);
    }
    return 0;
}
```

What will get printed if this is compiled into an executable file called "printArgs", and you run the command "./printArgs a b c"?

4. Write a function called "quadratic" that takes three int arguments (call them "a", "b", and "c"), and one float argument called "x", and returns the float value of (a multiplied by x multiplied by x) plus (b multiplied by x) plus c. Test your function with the following "main" function:

```
int main(int argc, char **argv) {
    printf("quadratic(1,2,1,3.0)=%f\n",quadratic(1,2,1,3.0));
    printf("quadratic(1,2,1,4.0)=%f\n",quadratic(1,2,1,4.0));
    printf("quadratic(1,-2,6,3.0)=%f\n",quadratic(1,-2,6,3.0));
    return 0;
}
```