

Programming Assignment 5 Questions 1-4

1. A void return type will not return any value after running the function whereas a datatype return type will return a value after executing the function.
2. The function prototype is used near the top of a program and includes the function's return type as well as its parameters. It is put near the top so that the compiler will encounter it first before the function call, which is when the function is actually executed in the main.

Ex: `int sum(int x, int y); // Function Prototype`

```
void main()
{
    int x = 1, y = 2, total;
    total = sum(x, y); // Function call
}
```

3.

3.1)

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3.2)

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4.

4.1) The variables are swapped. To return the larger integer, the if statement should be "return a" and the else statement should be "return b".

```
int max(int a, int b) {  
    if (a > b) {  
        return b;  
    } else {  
        return a;  
    }  
}
```

4.2) The programmer forgot to do a printf() function outside and after the for loop to print sum. After the for loop, the following line should read: printf("%d", sum);

```
int sumEven(int n) {  
    int sum = 0;  
    for (int i = 1; i <= n; i++) {  
        if (i % 2 == 0) {  
            sum += i;  
        }  
    }  
    return 0;  
}
```