Courtney Makua

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CSCI 3731 A

Dr Edward Pier

1. Why would it be a bad idea to enter the following bash commands?

cd

rm -r *

I believe using the cd command will make it difficult to keep track of what directory you are in and without indicating which directory you are in for each command you end up writing unwanted commands in other directories.

rm removes a file and it doesn't store anywhere like a trash bin, nor does it create a pop up and asks you if you are sure you would like to execute the command. Once the command is executed the file is gone, reduced to atoms. Ok maybe not atoms but basically you can no longer access that file ever again.

3. What is the difference between compiling and linking?

Compiling is reading the code file and generating an object file. Linking connect all the object files to produce an executable.

9. Would the following code compile in C++? Why or why not?

```
double x = 32.0;
int n = x;
```

It would compile in C++. The compiler casts data types when needed.

10. What is wrong with the following code, and how would you fix it?

```
int sum;
for(int i=0; i<1000; ++i) {
sum += i;
}
printf("Sum of 0 to 999 is %d\n", sum);
```

sum isn’t initialized. It would compile but assuming it starts at 0 is a bad idea since it sometimes won’t be 0 but “arbitrary garbage.”

11. What is wrong with the following code, and how would you fix it?

```
int n = 1;
if(n = 0) {
printf("n is zero\n");
}
```

n would be initialized as 0 since the if statement is using one = instead of two to compare.

Programming assignment 2.4