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Secure File Transfer:

3. scp writes the file to the destination, whereas rsync does the same except uses an algorithm to make it even faster.

4.

```
sent 1,577 bytes  received 35 bytes  3,224.00 bytes/sec
total size is 1,463  speedup is 0.91
-bash-4.2$ rsync -av t1.c rjlawson@linux-1.ece.iastate.edu:/home/rjlawson/Documents
sending incremental file list

sent 67 bytes  received 12 bytes  158.00 bytes/sec
total size is 1,463  speedup is 18.52
-bash-4.2$
```

Cryptographic Keys:

1. The file I created was called
 - a. Public Key = authorized_keys.pub
 - b. Private Key = authorized_keys
2. A password is usually used to authenticate or log into a system, whereas a passphrase is something that is derived from an encryption key and used to encrypt the protected object. If you end up forgetting it, there is usually no viable way to recover it. However, you can end up generating a new one.
3. The private key, the other one isn't encrypted because the file needed to store your private key makes you put in the passphrase when accessing it.