

Makefile Questions

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Makefile Questions

1. A makefile describes the relationship between a collection of files.
 - (a) goals
 - (b) order
 - (c) dependencies
 - (d) rules

Answer: C. dependencies

2. When running make, the command line arguments should be:
 - (a) Files that have changed since the last time make was run.
 - (b) A list of commands that make should execute.
 - (c) Files that should be updated (i.e. what you want).
 - (d) Actually, make does not accept command line arguments.

Answer: A. Files that have changed since the last time make was run.

3. The purpose of the make command is to:
 - (a) search for and act on files in or below a directory.
 - (b) execute commands to create or update files, based on the rules in a makefile.
 - (c) create a new file in the current directory.
 - (d) find lines that match a pattern.

Answer: B. execute commands to create or update files, based on the rules in a makefile.

4. Recall this explanation for the meaning of a makefile rule: "When [blank] is changed, run the command to update [blank]." The first blank in this explanation should be:

- (a) prerequisite
- (b) recipe
- (c) target
- (d) None of the above

Answer: C. target

5. Here is an example makefile rule.

```
aaa.txt: bbb.txt
ccc bbb.txt > aaa.txt
```

In this example, the filename `aaa.txt` on the first line is the rule's:

- (a) recipe
- (b) prerequisite
- (c) target
- (d) None of the above

Answer: C. target

6. Recall this explanation for the meaning of a makefile rule: "When [blank] is changed, run the command to update [blank]." The second blank in this explanation should be:

- (a) target
- (b) prerequisite
- (c) recipe
- (d) None of the above

Answer: B. prerequisite

7. Recall this explanation for the meaning of a makefile rule: "When [blank] is changed, run the command to update [blank]." The third blank in this explanation should be:

- (a) recipe
- (b) prerequisite
- (c) target
- (d) None of the above

Answer: A. recipe

8. Here is an example makefile rule.

```
aaa.txt: bbb.txt
ccc bbb.txt > aaa.txt
```

In this example, when does make execute the command on the second line?

- (a) when bbb.txt is older than aaa.txt
- (b) when bbb.txt is newer than aaa.txt
- (c) when ccc cannot be found
- (d) when bbb.txt does not exist

Answer: B. when bbb.txt is newer than aaa.txt

9. The purpose of the touch command is to:

- (a) Change a file's owner to be the current user.
- (b) Show a file's access history.
- (c) Change a file's modification time to the current time.
- (d) Show a file's permissions.

Answer: C. Change a file's modification time to the current time.

10. Here is an example makefile rule.

```
aaa.txt: bbb.txt
ccc bbb.txt > aaa.txt
```

In this example, the command `ccc bbb.txt > aaa.txt` is the rule's:

- (a) recipe
- (b) target
- (c) prerequisite
- (d) None of the above

Answer: A. recipe

11. Here is an example makefile rule.

```
aaa.txt: bbb.txt
ccc bbb.txt > aaa.txt
```

In this example, the filename bbb.txt on the