

1. Which of the following is true about Git?
- (a) In a project involving multiple collaborators, each collaborator can only pull changes from a centrally maintained repository and not from each other
 - (b) The versioning of Git is handled at a directory level
 - (c) `git add` is used to add files to the local repository directly
 - (d) `git commit -a` will commit the snapshot present in the staging area
 - (e) After merging a branch to master, one cannot checkout the branch anymore

Answer: (b)

2. Which of the following are true about GNU make?
- (a) In make, one can reference variables using either `$$`
 - (b) When using implicit rules in make, you have to specify all the compilation steps in detail
 - (c) Adding a `-` before a command will suppress the error associated with that command
 - (d) Some targets in make need not have any dependencies

Answer: (c), (d)

3. Which symbols are correctly mapped? (the dash `'-'` is the separator)
- (a) `<` - input redirect
 - (b) `||` - pipe
 - (c) `>>` - output overwrite
 - (d) `' '` - command substitution

Answer: (a), (d)

4. Which of the following expressions is a correct wildcard pattern if we want an expression in which the last character is not numeric?
- (a) `*[!numeric]`

- (b) `*[0-9]`
- (c) `^[!0-9]`
- (d) `*[!0-9]`

Answer: (d)

5. Which of the following commands is used to display the only directory that exist in the current directory?

- (a) `ls -l | grep '^d'`
- (b) `ls | grep '^d'`
- (c) `ls | grep '*d'`
- (d) `ls -l | grep '#d'`

Answer: (a)

6. Which of the following is true of gdb/debugging?

- (a) Assertions are controlled by compiler-time symbol `DEBUG`
- (b) If an executable is named say `broken`, `gdb broken` will run the program.
- (c) If we wish to move from one breakpoint to the next, we have to use `next`
- (d) The command `step` will step into function calls
- (e) The command `display` is for continuous monitoring of a variable as you step through the program

Answer: (d), (e)

7. Suppose a user has so far used commands in git from the set `{init, add, branch}` and no other commands. Now he types in `git branch`. Which of the following is true?

- (a) The command will indicate there are no branches
- (b) The command will indicate there is one branch
- (c) The command will indicate there are two branches
- (d) The command will result in an error

Answer: (b)

8. Which among the following is true about JavaScript?

- (a) Scripts can be placed only in the `<body>` section and not in the `<head>` of a HTML file
- (b) Same variable can be used to hold different data types
- (c) The keyword `new` is used for object instantiation
- (d) The `catch` statement allows you to create custom errors
- (e) `innerHTML` is a property of an object in `document.getElementById(\"demo\").innerHTML`

Answer: (b), (c), (e)

9. Which of the following is/are true about HTML?

- (a) We enclose HTML tags within `{ }`
- (b) the `src` tag is used to render an image on a webpage
- (c) HTML tags are case sensitive in nature
- (d) The `iframe` tag is used to display a webpage within a webpage
- (e) the `select` tag defines a dropdown in forms

Answer: (d), (e)

10. Which of the following is/are true about HTML/CSS?

- (a) A dot is used to select an element with a specific ID in CSS
- (b) The value of the ID attribute is case sensitive
- (c) `class` is an attribute as opposed to element
- (d) In CSS, internal styling works by using a `<link>` element in the `<head>` section

Answer: (b), (c)