

1. What is the function of the linking process after compilation?

- It writes the executable into the memory of the Arduino
- It merges the libraries with the application code into a single executable
- It converts the format of the executable file into .hex format
- All of the above

2. What is the role of avrdude?

- It writes the executable into the memory of the Arduino
- It merges the libraries with the application code into a single executable
- It converts the format of the executable file into .hex format
- None of the above

3. Why are classes (in C++) useful?

- Their use improves code performance
- They reduce the memory requirements on the processor
- They allow the programmer to evaluate the performance of the system
- They improve the organization and understandability of the code

4. What is one way that a sketch can invoke a function contained inside a class?

- The name of the function can be concatenated with the name of the class, with a comma in between.
- The name of the function can be concatenated with the name of the class, with a colon in between.
- The name of the class can be concatenated with the name of the function, with a period in between.
- The name of the class can be concatenated with the name of the function, with no symbol in between.

5. Which of the following statements is true?

- ☐ The setup() function is executed once and the loop() function is executed a fixed number of times.
- ☐ The setup() function is executed after each iteration of loop().
- ☐ The loop() function must contain either a while loop or a for loop.
- ☒ The setup() function is executed once and the loop() function is executed iteratively, as long as the Arduino is powered on.

6. True or False: An analog pin can accept analog inputs and drive analog outputs.

- ☐ True
- ☒ False

7. If a sketch running on an Arduino UNO executes the following statements, what voltage would be expected on pin 1 afterwards?

```
pinMode(1, OUTPUT);  
digitalWrite(1, HIGH);
```

- ☐ 0
- ☐ 3.3
- ☒ 5
- ☐ 12

8. True or False: The delay() function causes program execution to pause for a number of milliseconds.

- ☒ True
- ☐ False