

16.216: ECE Application Programming

Fall 2012

Lecture 9: Key Questions

September 24, 2012

1. Discuss how to use `if` statements to check that a value falls within a desired range.

- 2

3. Describe the basic format of a `switch` statement, including its general usage, the use of `case` and `default`, and the use of the `break` statement.

4. Describe a situation in which you might not want to use a `break` statement at the end of a given case.

5. **Example:** Given the code below:

```
int main() {
    char grd;

    printf("Enter Letter Grade: ");
    scanf("%c",&grd);
    printf("You are ");

    switch (grd) {
    case 'A' :
        printf("excellent\n");
        break;
    case 'B' :
        printf("good\n");
        break;
    case 'C' :
        printf("average\n");
        break;
    case 'D' :
        printf("poor\n");
        break;
    case 'F' :
        printf("failing\n");
        break;
    default :
        printf("incapable of reading directions\n");
        break;
    }
    return 0;
}
```

What does the program print if the user inputs:

- a. A
- b. B+
- c. c
- d. X

6. How could we easily change each case to recognize both upper and lowercase inputs?