CSE142 Summer 2000 Midterm 2 Answers

Multiple Choice

Version A

1.	B
2.	E
3.	ANY
4.	A
5.	D
6.	A
7.	B
8.	C
9.	C
10.	B
11.	B
12.	E

Version B

1.	E
2.	B
3.	C
4.	B
5.	ANY
6.	B
7.	C
8.	A
9.	D
10.	A
11.	E
12.	B

13.

```c
#include <stdio.h>
/* define any needed constants here */

#define GAS_COST  2.00
#define MPG       13.0

int main(void) {

    /* declare all necessary variables here */
    double miles;
    double money;
    double money_needed;

    /* read in the user's input */
    printf("How far do you want to go? ");
    scanf("%lf", &miles);
    printf("How much money do you have? ");
    scanf("%lf", &money);

    /* compute and print the necessary output */
    money_needed = (miles / MPG) * GAS_COST;

    if (money_needed > money) {
        printf("Whoops!  You need $%.2f more to make the trip!\n",
            money_needed - money);
    }
    else {
        printf("You'll have $%.2f left over after the trip!\n",
            money - money needed);
    }

    return 0;
}
```

14.

```c
#include <stdio.h>

int main(void) {

    /* Declare all necessary variables here */
    int age;

    /* Prompt the user and perform the necessary input */
    printf("Enter your age: ");
    scanf("%d", &age);

    /* do the necessary computation and remaining I/O */
    if (age < 8) printf("You get a red balloon!\n");
    else if (age < 18) printf("You get a stylish t-shirt!\n");
    else printf("You get an exciting C book!\n");

    if ((age % 2) == 1)
        printf("You also get a Britney Spears CD!\n");

    return  0;
}
```