

1.

```
#include <stdio.h>

int main() {
    int x, y, z;

    printf("Enter the value of x: ");
    scanf("%d", &x);

    printf("Enter the value of y: ");
    scanf("%d", &y);

    printf("Enter the value of z: ");
    scanf("%d", &z);

    if ((x > y && x < z) || (x < y && x > z)) {
        printf("1\n");
    } else if ((y > x && y < z) || (y < x && y > z)) {
        printf("2\n");
    } else {
        printf("3\n");
    }

    return 0;
}
```

2.

```
#include <stdio.h>
#include <string.h>
#include <ctype.h>

int isStrongPassword(const char *password) {
    int length = strlen(password);
    int hasLowerCase = 0, hasUpperCase = 0, hasDigit = 0, hasSpecialChar = 0;

    for (int i = 0; i < length; i++) {
        if (islower(password[i])) {
            hasLowerCase = 1;
        } else if (isupper(password[i])) {
            hasUpperCase = 1;
        } else if (isdigit(password[i])) {
            hasDigit = 1;
        } else if (strchr("!@#$$%^&*()-+", password[i])) {
            hasSpecialChar = 1;
        }
    }
}
```

```
    return (length >= 8) && hasLowerCase && hasUpperCase && hasDigit &&
hasSpecialChar;
}
```

```
int main() {
    char password[50];

    printf("Enter the password: ");
    scanf("%s", password);

    if (isStrongPassword(password)) {
        printf("The password is strong.\n");
    } else {
        printf("The password is not strong.\n");
    }

    return 0;
}
3.
```

```
#include <stdio.h>
#include <math.h>
```

```
int main() {
    int projectHours, availableDays;

    printf("Enter the number of hours needed for the project: ");
    scanf("%d", &projectHours);

    printf("Enter the number of available days: ");
    scanf("%d", &availableDays);

    int normalWorkingDays = availableDays - (int)(0.1 * availableDays);
    int normalWorkingHours = normalWorkingDays * 8;

    int trainingDays = availableDays - normalWorkingDays;
    int trainingHours = trainingDays * 8;

    int totalWorkingHours = normalWorkingHours + trainingHours;

    int hoursLeft = projectHours - totalWorkingHours;
```

```
if (hoursLeft <= 0) {  
    printf("The project can be finished on time.\n");  
} else {  
    printf("The project cannot be finished on time. Hours needed: %d\n", hoursLeft);  
}  
  
return 0;  
}
```