

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;
```

```
}
```