1.determining if a number is even or odd

```c
#include <stdio.h>
int main(){
    int num;

    printf("enter a number");
    scanf("%d", &num);

    if(num % 2 == 0){
       printf("%d is even.\n",num);
    }else{
       printf("%d is odd.\n",num);
    }
    return 0;
}
```

2.determing positive and negative numbers

```c
#include <stdio.h>
int main() {
    double num;
    printf("Enter a number: ");
    scanf("%lf", &num);
    if (num <= 0.0) {
        if (num == 0.0) {
            printf("You entered 0.");
        } else {
            printf("You entered a negative number.");
        }
    } else {
        printf("You entered a positive number.");
    }
    return 0;
}
```

3. calculating the average of three exam scores.

```c
include <stdio.h>
int main() {
    double# score1, score2, score3, average;
    printf("Enter the score for exam 1 (between 0 and 100): ");
    scanf("%lf", &score1);
    printf("Enter the score for exam 2 (between 0 and 100): ");
    scanf("%lf", &score2);
    printf("Enter the score for exam 3 (between 0 and 100): ");
    scanf("%lf", &score3);
    average = (score1 + score2 + score3) / 3.0;
    if (average >= 90.0) {
```

```
        printf("Your average is %.2lf which is an A.", average);
    } else if (average >= 80.0) {
        printf("Your average is %.2lf which is a B.", average);
    } else if (average >= 70.0) {
        printf("Your average is %.2lf which is a C.", average);
    } else if (average >= 60.0) {
        printf("Your average is %.2lf which is a D.", average);
    } else {
        printf("Your average is %.2lf which is an F.", average);
    }
    return 0;
}
```

4. converting temperature from Fahrenheit to Celsius

```
#include <stdio.h>
int main() {
    double temperature;
    char unit;
    printf("Enter the unit (F/C): ");
    scanf("%c", &unit);
    if (unit != 'F' && unit != 'f' && unit != 'C' && unit != 'c') {
        printf("Invalid input. Unit should be either F or C.");
        return 0;
    }
    printf("Enter the temperature value: ");
    scanf("%lf", &temperature);
    if (unit == 'F' || unit == 'f') {
        temperature = (temperature - 32.0) * 5.0 / 9.0;
        printf("Converted temperature: %.2lf degrees Celsius", temperature);
    } else {
        temperature = temperature * 9.0 / 5.0 + 32.0;
        printf("Converted temperature: %.2lf degrees Fahrenheit", temperature);
    }
    return 0;
}
```

5.