

Program 4

Resistor Calculations

Name: _____ Time spent: _____ min

Write a program to read in two resistor values (**ints**) from the user and calculate and print the series and parallel resistance of the two inputs 100 pts

Use a **while(1){ }** construct to run the calculations in an infinite loop

The input resistor values range from 1Ω to $1M\Omega$, entered in long form
 $10K\Omega$ would be entered as 10000

Provide **flow diagram**, **code**, and **results** for { $1K\Omega$, $1K\Omega$ }, { $2.5K\Omega$, $3K\Omega$ }, { 10Ω , $10K\Omega$ }, { $10K\Omega$, $30K\Omega$ }

```
Programming_Project.exe [C/C++ Application] [pid: 8]
Program HW #4
Dr. Johnson

Resistor Combination Calculator

please enter your 2 resistor values: 500 700
500 Ohms in series with 700 Ohms = 1200.000000 Ohms
500 Ohms in parallel with 700 Ohms = 291.666656 Ohms

please enter your 2 resistor values: 20000 10000
20000 Ohms in series with 10000 Ohms = 30000.000000 Ohms
20000 Ohms in parallel with 10000 Ohms = 6666.666504 Ohms

please enter your 2 resistor values:
```

Only material covered in class allowed in this program

`while(1){ ... }` construct – used to create an infinite loop

```
// program comments
```

```
...
```

```
int main(void){
```

```
    declarations – anything only done once
```

```
    ...
```

```
    while(1){           // start infinite loop
```

```
        ...
```

```
        code you want to run in the infinite loop
```

```
        ...
```

```
    }
```

```
    return 0;
```

```
}
```