



main.c

Output



```
1 // Kyle Reed
2 // COS-231-300
3 // Prof. Wu
4 // 8 October 2024
5
6 // C Program defining hard coded V, I, and R values and then returning values for
  answers in a table format for the circuit provided
7 #include <stdio.h>
8
9 // Declaration of hard coded floating point numbers for V, I, and R
10 float V=36, I=1.33, R1=3, R2=8, R3=4, RF=12;
11 float VR1, VR2, VR3, VRF, IR1, IR2, IR3;
12
13 int main() {
14 // Calculator for values of current and voltage
15     VR1 = I * R1;
16     VR2 = I * R2;
17     VR3 = I * R3;
18     VRF = VR1 + VR2 + VR3;
19     IR1 = VRF / R1;
20     IR2 = VRF / R2;
21     IR3 = VRF / R3;
22
23 // Returns results in a table format for the values
24     printf("Voltage of R1: %.2f V.\n", VR1);
25     printf("Voltage of R2: %.2f V.\n", VR2);
```

Run



main.c

Output



```
10 float V=36, I=1.33, R1=3, R2=8, R3=4, RF=12;
11 float VR1, VR2, VR3, VRF, IR1, IR2, IR3;
12
13 int main() {
14     // Calculator for values of current and voltage
15     VR1 = I * R1;
16     VR2 = I * R2;
17     VR3 = I * R3;
18     VRF = VR1 + VR2 + VR3;
19     IR1 = VRF / R1;
20     IR2 = VRF / R2;
21     IR3 = VRF / R3;
22
23     // Returns results in a table format for the values
24     printf("Voltage of R1: %.2f V.\n", VR1);
25     printf("Voltage of R2: %.2f V.\n", VR2);
26     printf("Voltage of R3: %.2f V.\n", VR3);
27     printf("Voltage of RF: %.2f V.\n", VRF);
28     printf("Current of R1: %.2f A.\n", IR1);
29     printf("Current of R2: %.2f A.\n", IR2);
30     printf("Current of R3: %.2f A.\n", IR3);
31
32     return 0;
33 }
```

Run



main.c

Output



```
/tmp/3sHamxXoW4.o
```

```
Voltage of R1: 3.99 V.
```

```
Voltage of R2: 10.64 V.
```

```
Voltage of R3: 5.32 V.
```

```
Voltage of RF: 19.95 V.
```

```
Current of R1: 6.65 A.
```

```
Current of R2: 2.49 A.
```

```
Current of R3: 4.99 A.
```

```
=== Code Execution Successful ===
```