

Introductory Programming UESTC1005

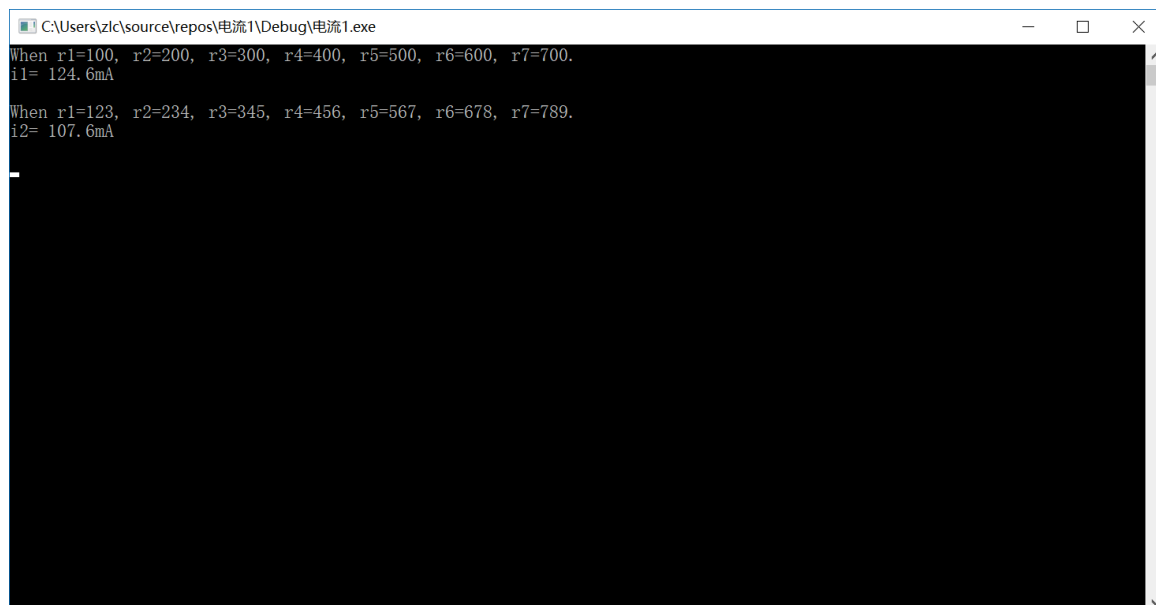
STUDENT NAME: 张立澄

STUDENT NUMBER: 2017200602011

You will need to complete the demonstration of this week lab and submit this report into BB (it will be added into your portfolio of work).

Exercise 4: Functions

Task_A: Follow the instructions in Week 6 Lab manual and past your screen short of your result here.



```
C:\Users\zlc\source\repos\电流1\Debug\电流1.exe
When r1=100, r2=200, r3=300, r4=400, r5=500, r6=600, r7=700.
i1= 124.6mA

When r1=123, r2=234, r3=345, r4=456, r5=567, r6=678, r7=789.
i2= 107.6mA
```

Task_B: Please attach your source code here.

```
#include<stdio.h>
float    float I float R
{
    float V = I*R;
    return
}
float    float R1 float R2
{
    float R = R1 + R2;
    return
}
float parallel(float R1, float R2)
{
    float R = 1 / (1 / R1 + 1 / R2);
    return
}
float parallel_three(float R1, float R2, float R3)
{
    float R = 1 / (1 / R1 + 1 / parallel(R2, R3));
    return
}
void main()
{
    float r1 = 100, r2 = 200, r3 = 300, r4 = 400, r5 = 500, r6 = 600, r7 = 700;
    float r8, r9, r10, i1, i2;
    r8 = series(r1, r2);
    r9 = parallel(r3, r4);
    r10 = series(parallel(r6, r7), r5);
    i1 = 12000 / parallel_three(r8, r9, r10);
    r1 = 123, r2 = 234, r3 = 345, r4 = 456, r5 = 567, r6 = 678, r7 = 789;
    r8 = series(r1, r2);
    r9 = parallel(r3, r4);
    r10 = series(parallel(r6, r7), r5);
    i2 = 12000 / parallel_three(r8, r9, r10);
    "When r1=100, r2=200, r3=300, r4=400, r5=500, r6=600, r7=700.\n"
    "i1 = %.1fmA\n\n"
    "When r1=123, r2=234, r3=345, r4=456, r5=567, r6=678, r7=789.\n"
    "i2 = %.1fmA\n\n"
    getchar();
}
```

Exercise 5: Random numbers

Task_A: Follow the instructions in Week 6 Lab manual and past your screen short of your result here.



```
C:\Users\zlc\source\repos\随机数1\Debug\随机数1.exe
6-sided die: 2
20-sided die: 12
```

Task_B: Please attach your source code here.

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
float getRand() {
    return rand() / (RAND_MAX + 1.0);
}
int rollDie(int a) {
    return getRand()*a+1 ;
}
int main() {
    srand(time(NULL));
    getRand();
    int value = 0;
    value = rollDie(6);
    printf("6-sided die: %i\n", value);
    value = rollDie(20);
    printf("20-sided die: %i\n", value);
    getchar();
}
```