

Int a[9] =

a[0]=11	a[1]=12	a[2]=13	a[3]=14	a[4]=15	a[5]=16	a[6]=17	a[7]=18	a[8]=19
1000	1004	1008	1012	1016	1020	1024	1028	1032

a =1000

Array name(**a**) contains the base address of the array(***1000**).

***1000 → a[0] → [0]a → 11**

***(1000+1) → *(1004) → a[1] → 1[a] → 12**

***(1000+2) → *(1008) → a[2] → 2[a] → 13**

***(1000+3) → *(1012) → a[3] → 3[a] → 14**

***(1000+4) → *(1016) → a[4] → 4[a] → 15**

***(1000+5) → *(1020) → a[5] → 5[a] → 16**

***(1000+6) → *(1024) → a[6] → 6[a] → 17**

***(1000+7) → *(1028) → a[7] → 7[a] → 18**

***(1000+8) → *(1032) → a[8] → 8[a] → 19**

Note: Compiler change both the representation into pointer form.

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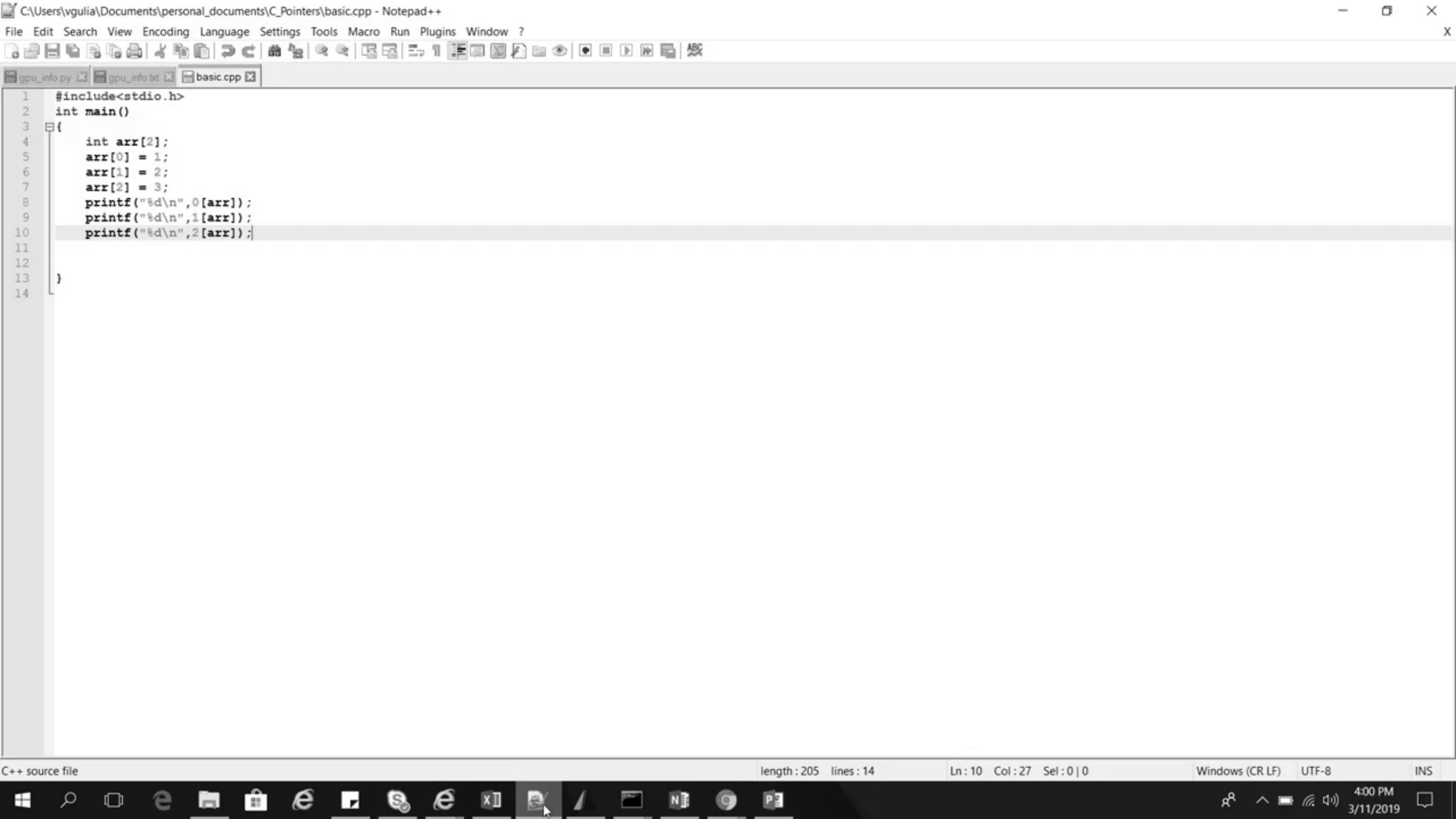
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*(1000+8) → *(1032) → a[8] → 8[a] → 19

Note: Compiler change both the representation into pointer farm

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```
C:\Users\vgulia\Documents\personal_documents\C_Pointers\basic.cpp - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
gpu_info.py gpu_info.txt basic.cpp
1  #include<stdio.h>
2  int main()
3  {
4      int arr[2];
5      arr[0] = 1;
6      arr[1] = 2;
7      arr[2] = 3;
8      printf("%d\\n",0[arr]);
9      printf("%d\\n",1[arr]);
10     printf("%d\\n",2[arr]);
11
12
13 }
14
C++ source file
length : 205 lines : 14
Ln : 10 Col : 27 Sel : 0 | 0
Windows (CR LF) UTF-8 INS
4:00 PM 3/11/2019
```



gpu_info.py x gpu_info.bt x basic.cpp x

```
1 #include <stdio.h>
2 int main() {
3     int arr[2];
4     arr[0] = 1;
5     arr[1] = 2;
6     printf("%d\n", arr[0]);
7     printf("%d\n", arr[1]);
8 }
9
10
11
12
13
```



Recycle Bin



Google Chrome

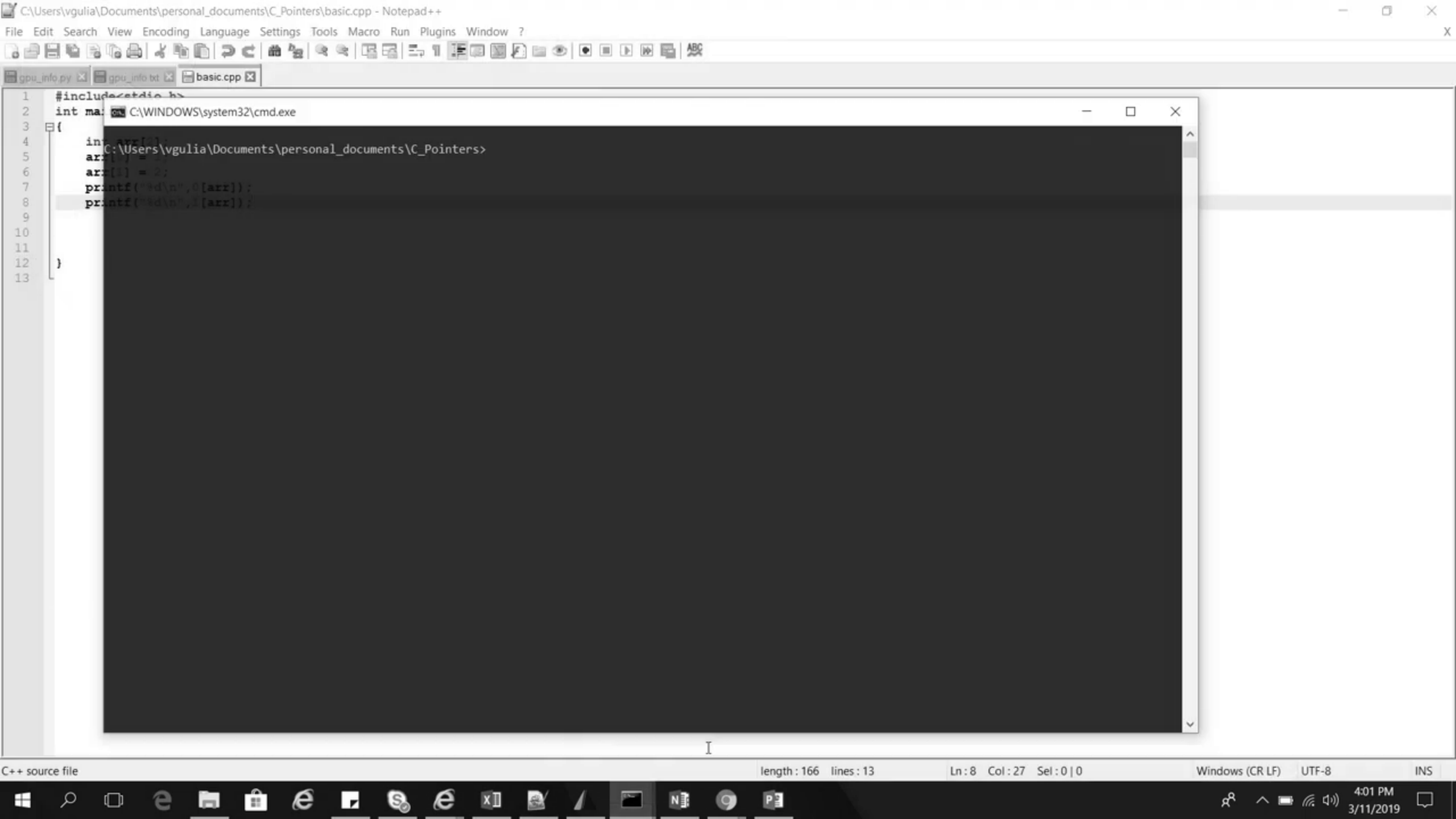


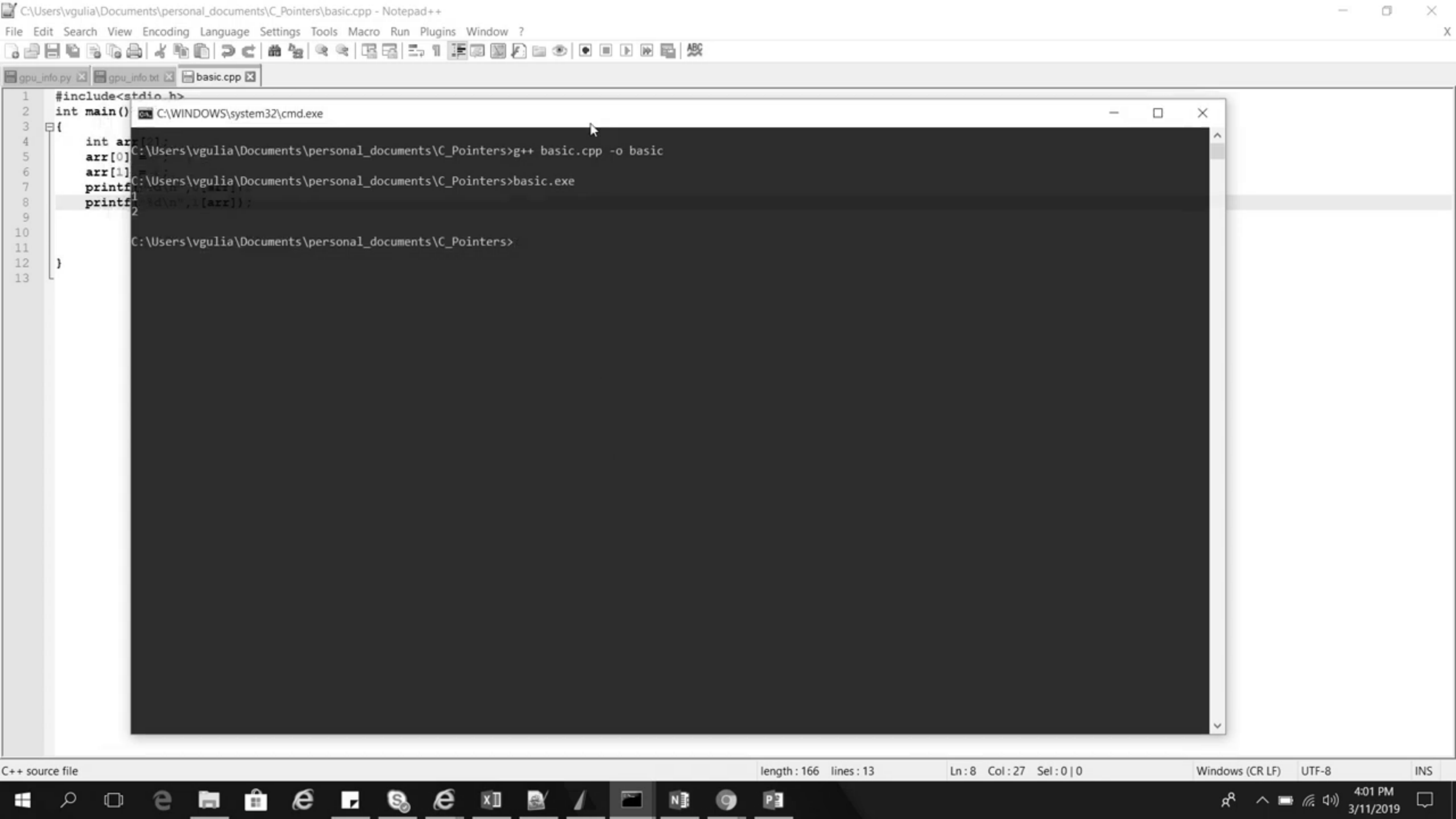
ITSD



IT Service Desk

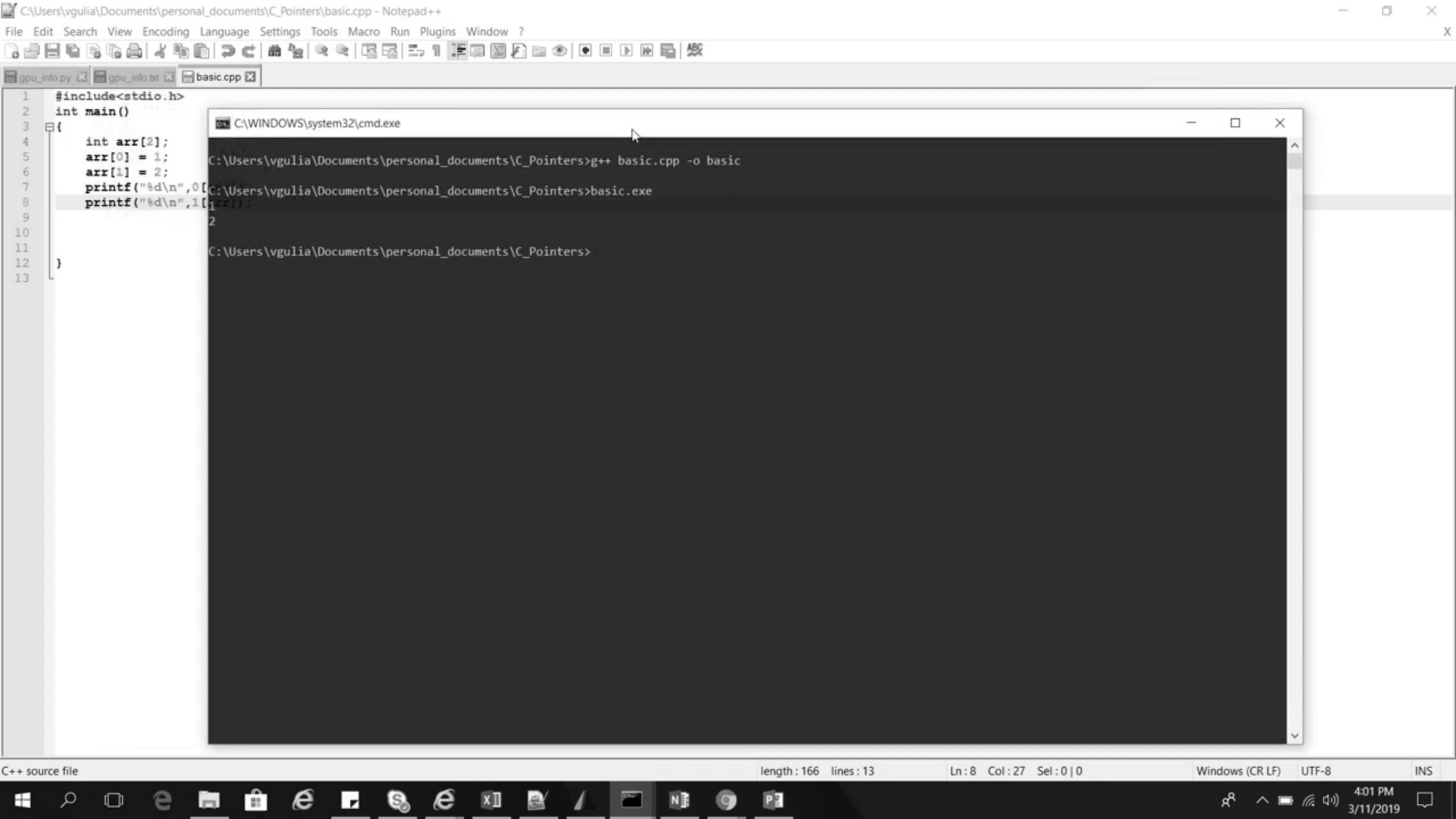






```
#include<stdio.h>
int main()
{
    int arr[2];
    arr[0] = 1;
    arr[1] = 2;
    printf("arr[0] = %d\n", arr[0]);
    printf("arr[1] = %d\n", arr[1]);
}
```

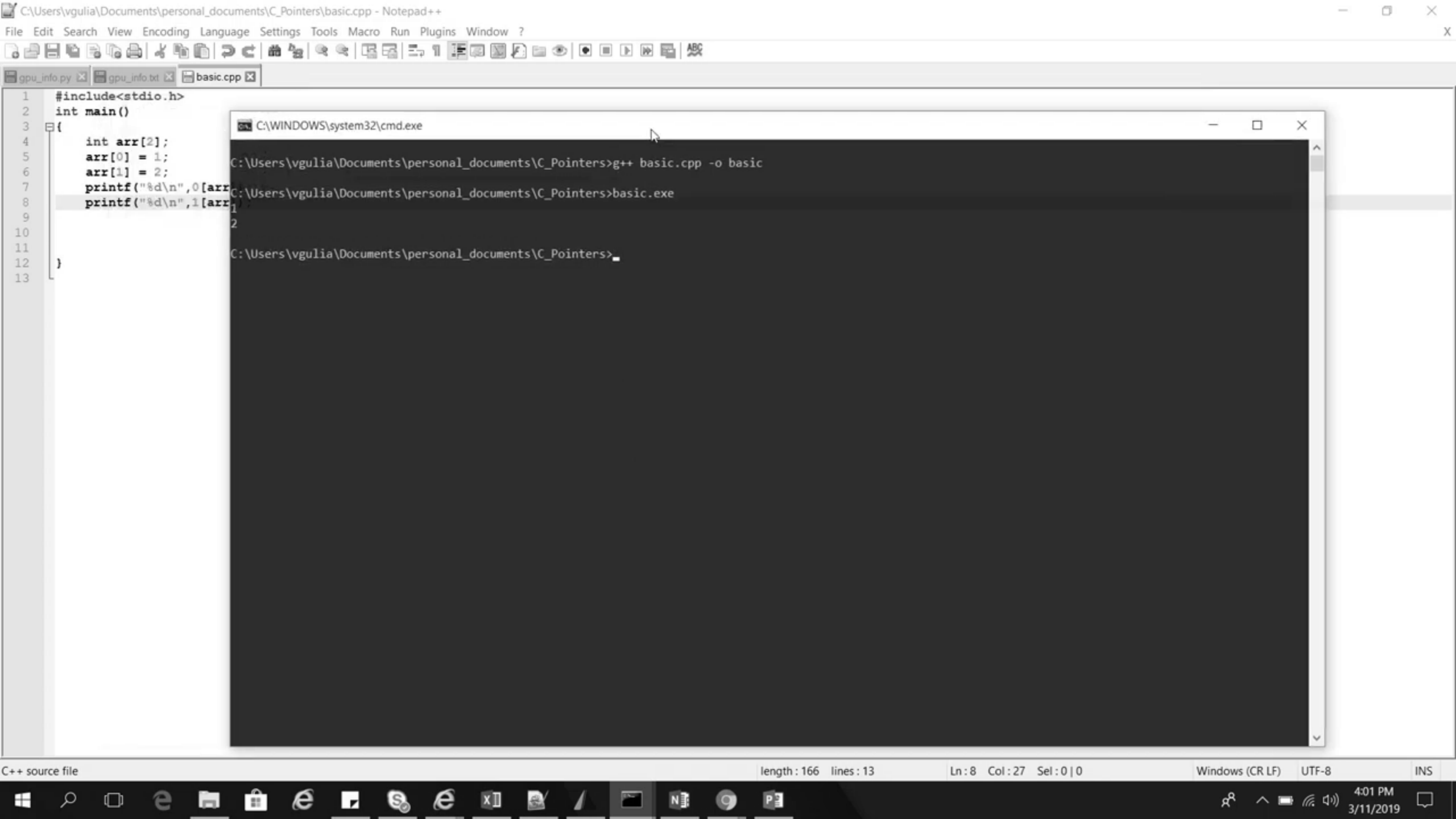
```
C:\WINDOWS\system32\cmd.exe
C:\Users\vgulia\Documents\personal_documents\C_Pointers>g++ basic.cpp -o basic
C:\Users\vgulia\Documents\personal_documents\C_Pointers>basic.exe
1
2
C:\Users\vgulia\Documents\personal_documents\C_Pointers>
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```
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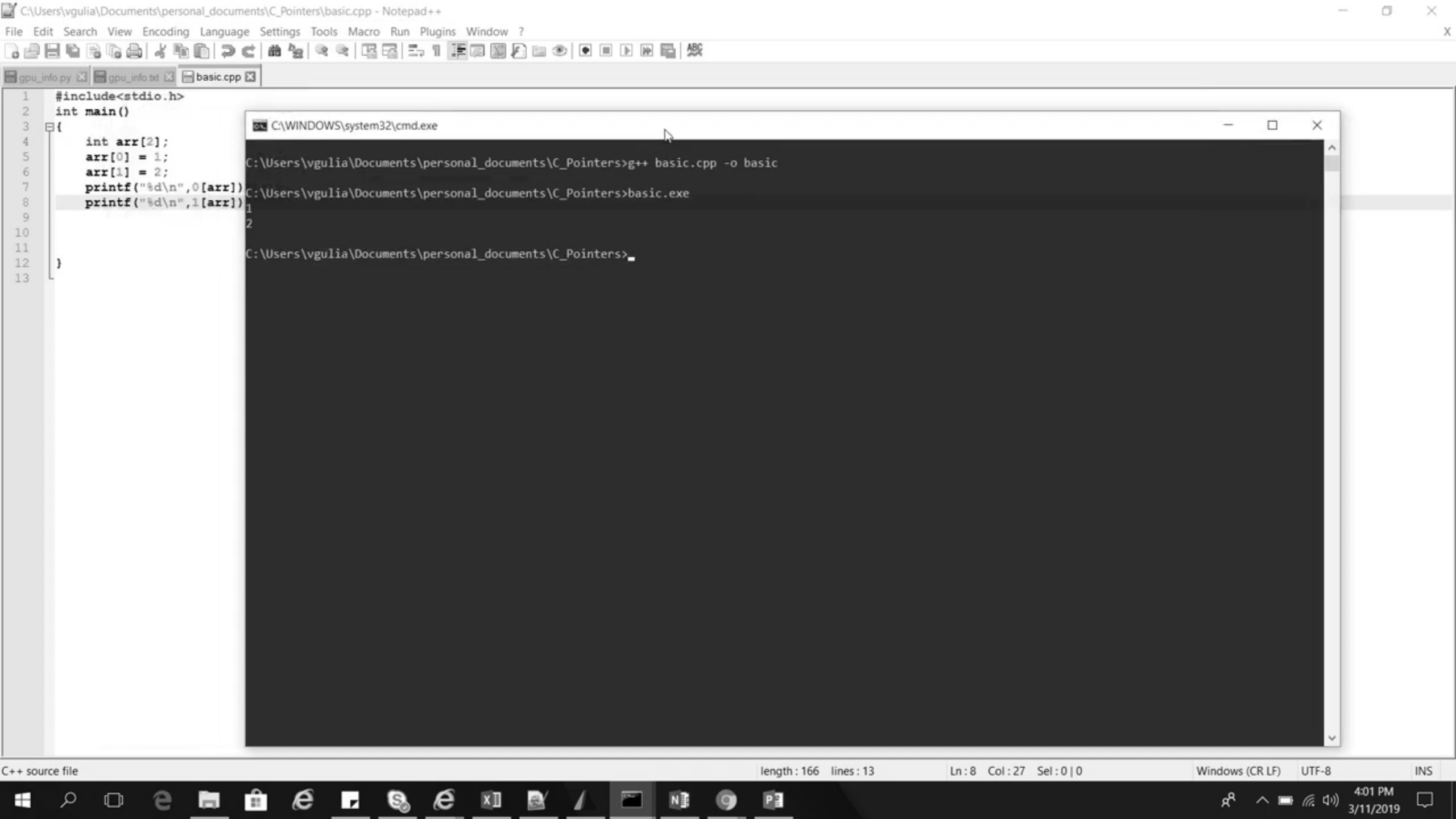
C++ source file
length : 166 lines : 13
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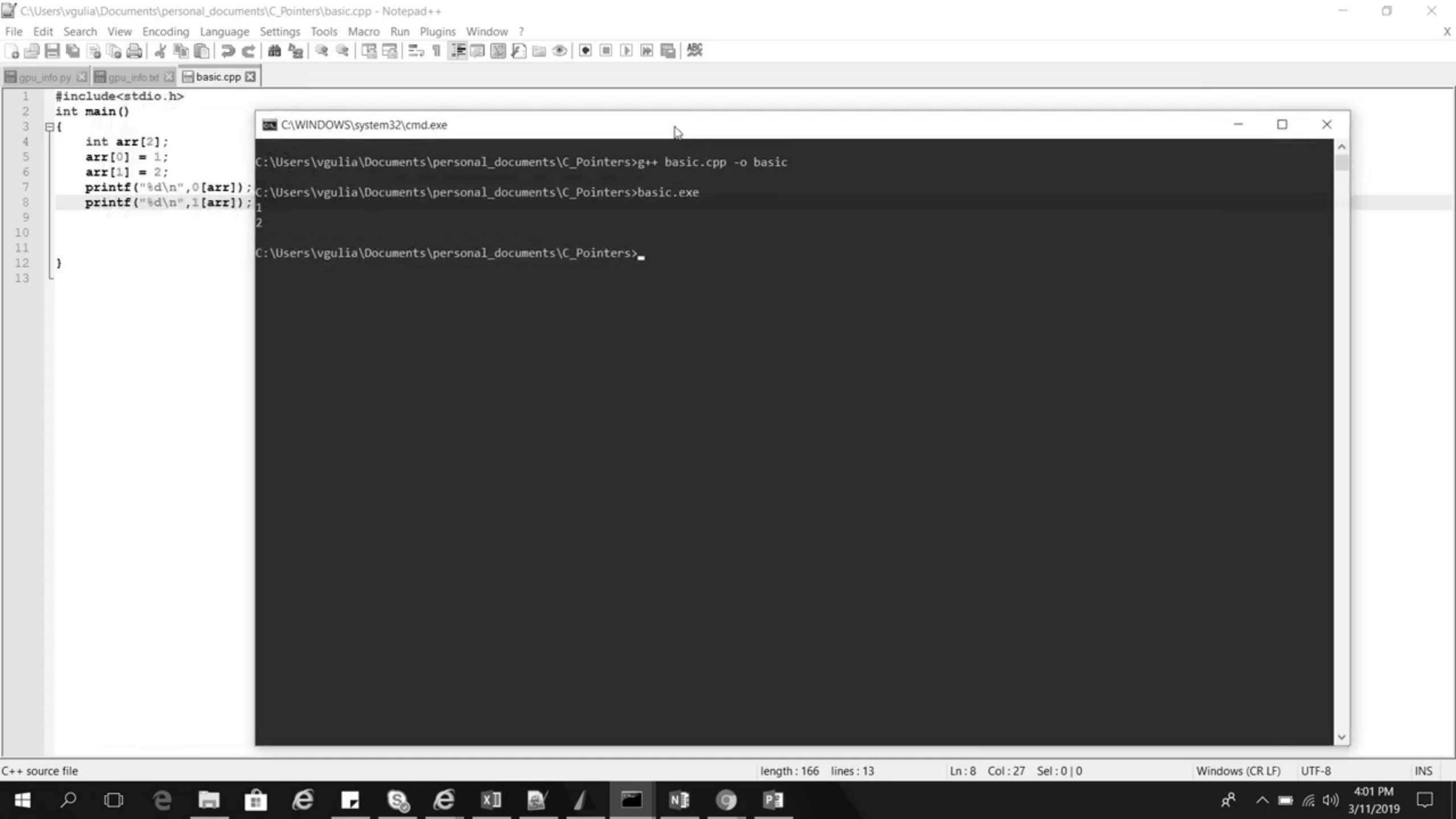
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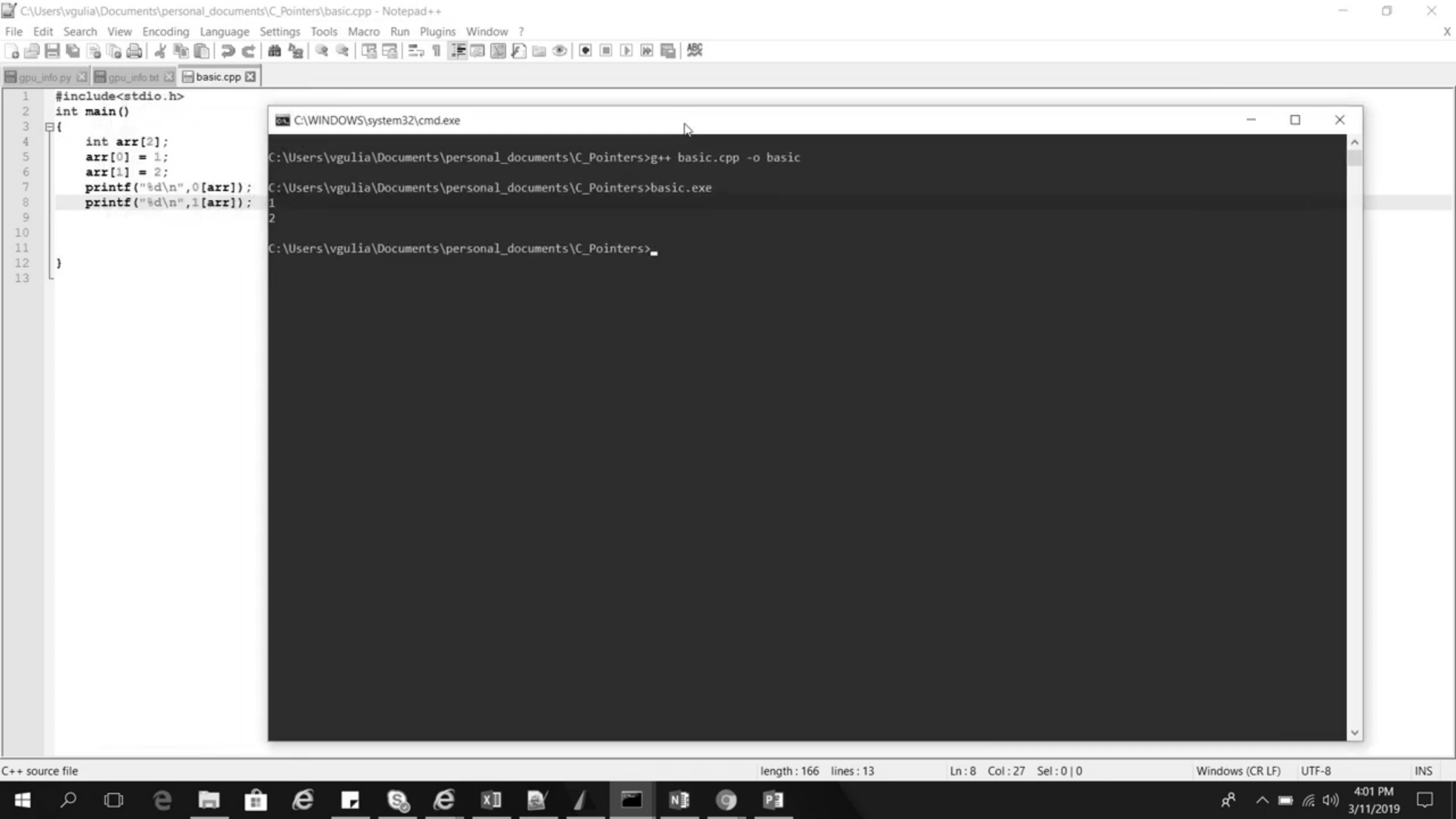


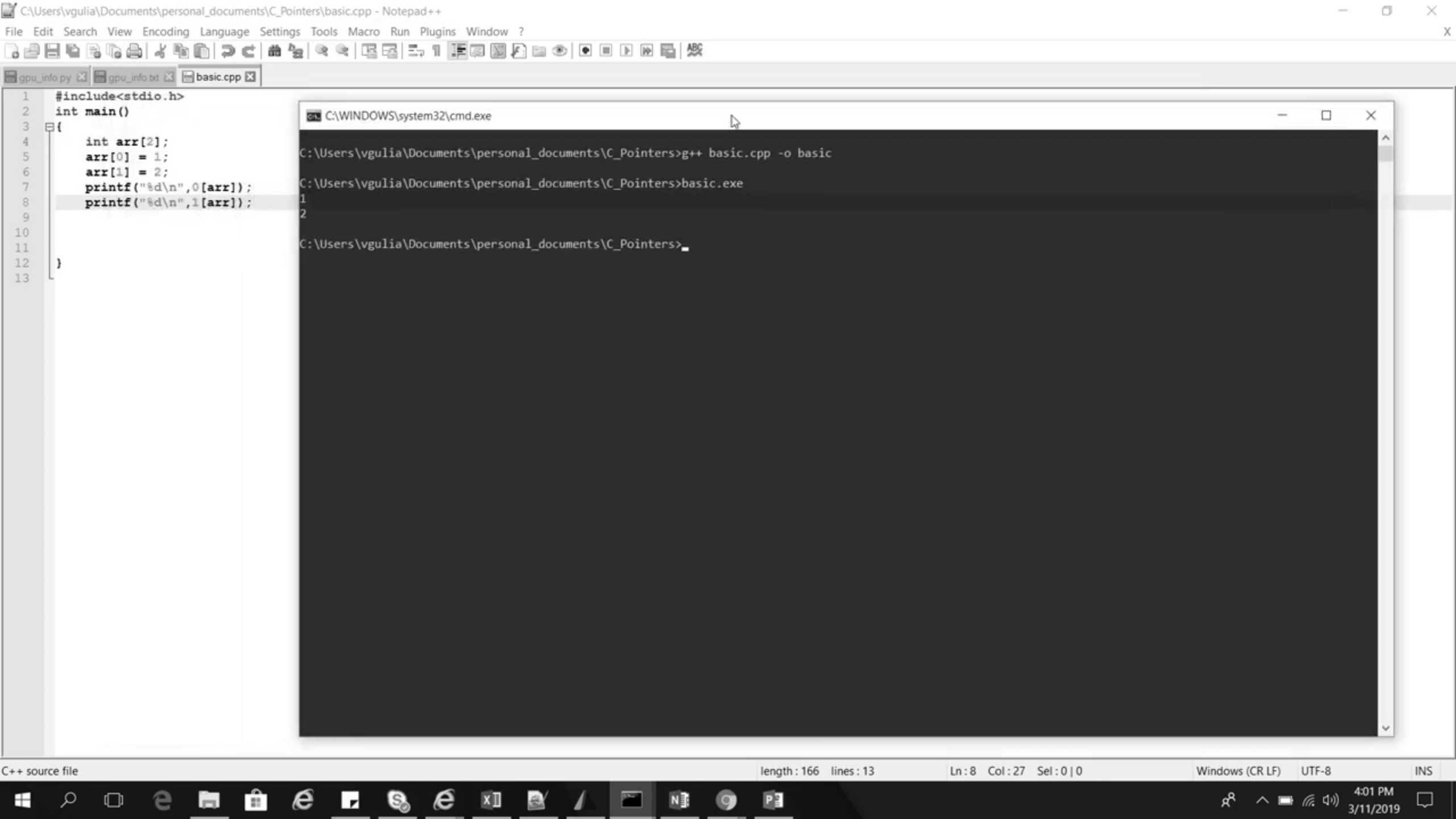
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C++ source file
length : 166 lines : 13
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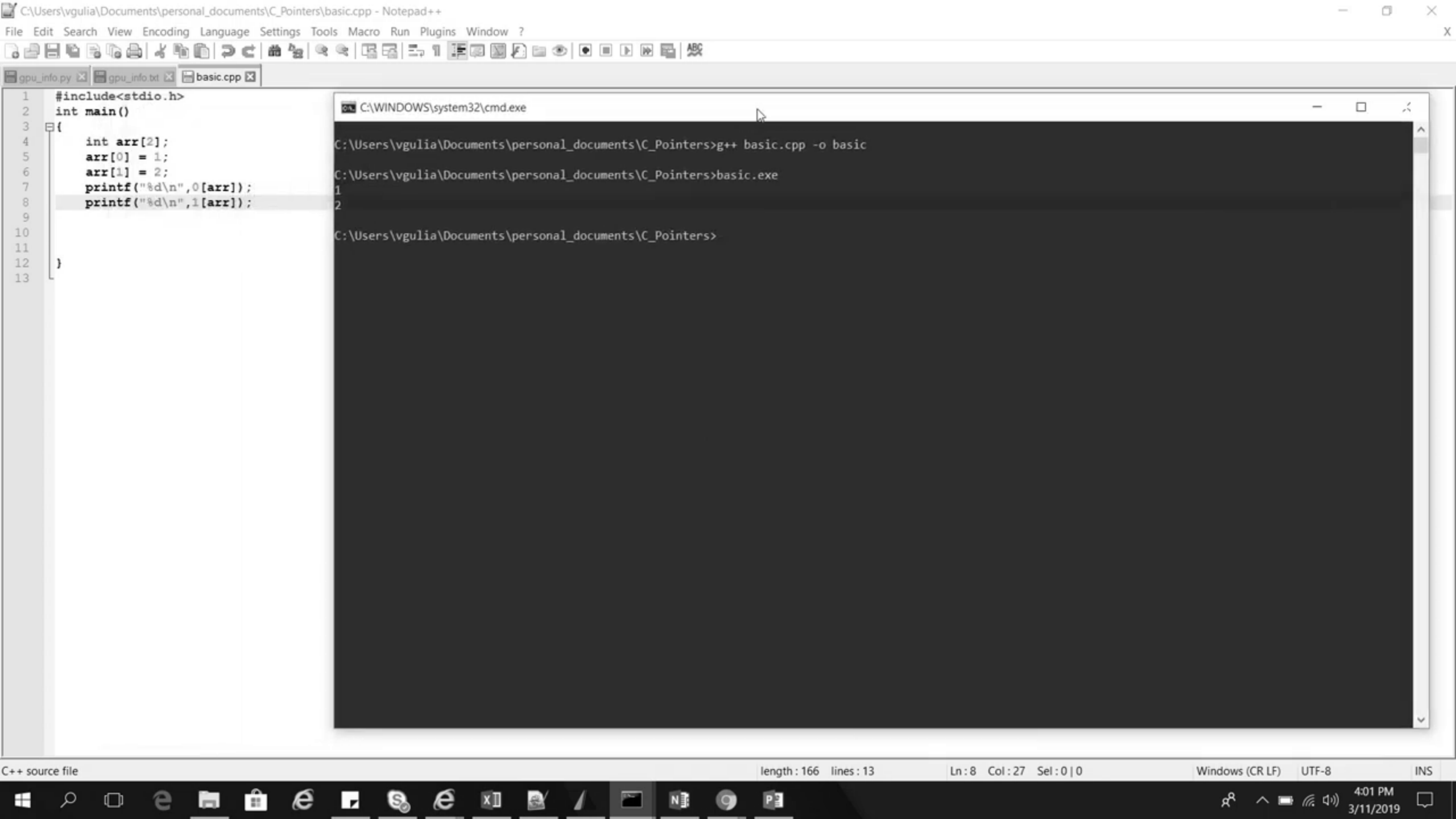


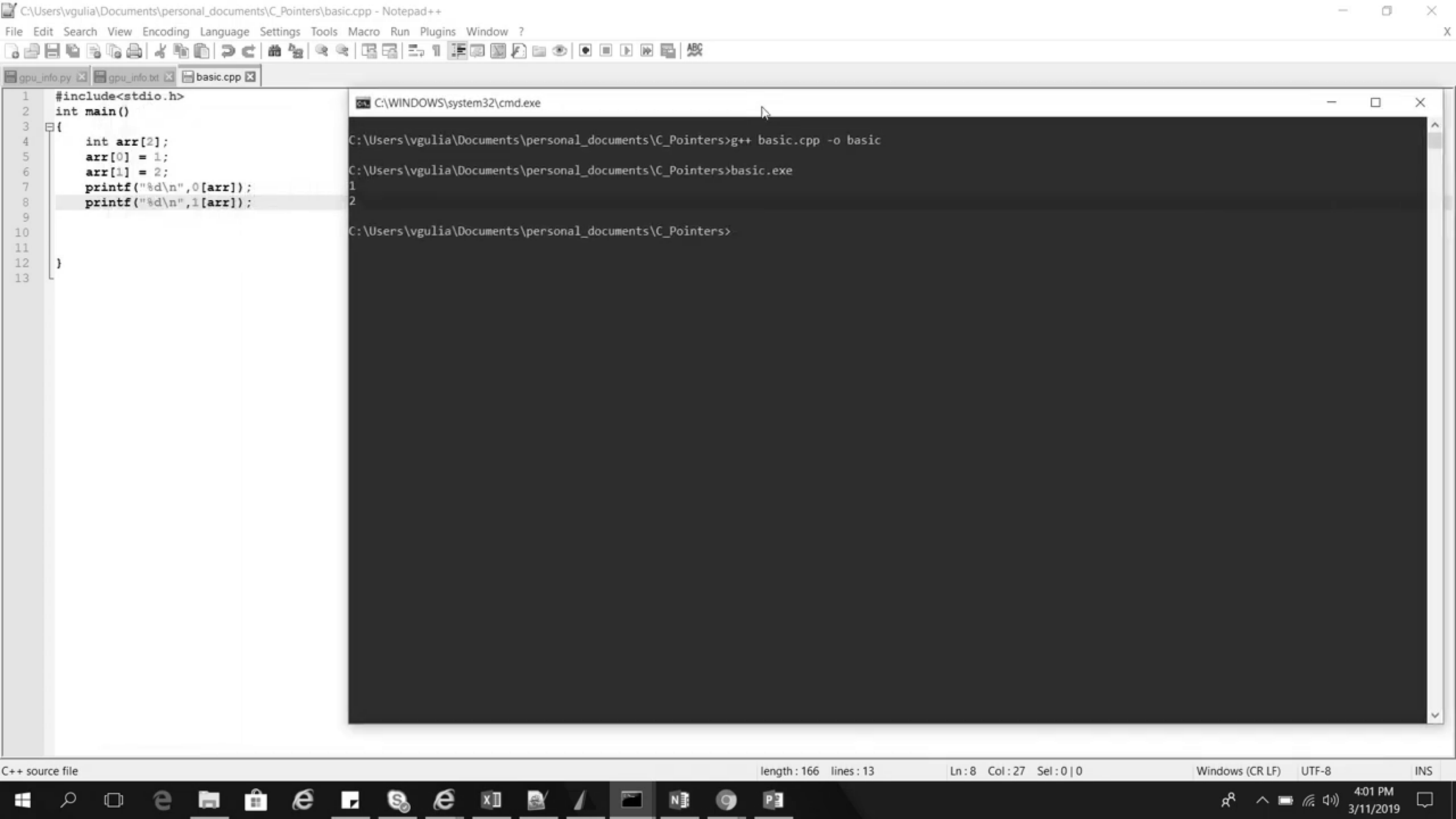


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13

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C++ source file
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C:\Users\vgulia\Documents\personal_documents\C_Pointers>basic.exe
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C:\Users\vgulia\Documents\personal_documents\C_Pointers>

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Result:

Because compiler converts the array operation in pointers before accessing the array elements.
So $a[1] == 1[a]$ but $a[1] != [1]a$, Remember this.

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