First Document

EricLin

2016-4-7

```cpp
int main(){
        printf("hello,    world");
        return 0;
}
```

```cpp
#include<iostream>
#define Trace(m) cout<<#m"="<<(m)<<endl;
using namespace std;
//this is a basic cpp template
/*
 * output: print hello world.
latexbegin{
        This is embeded latex code.
        End!
}latexend
 */
int main(){
        cout<<"Hello       World."<<endl;
    return 0;
}
```

New method:

```cpp
1   #include<iostream>
2   #define Trace(m) cout<<#m"="<<(m)<<endl;
3   using namespace std;
4   //this is a basic cpp template
5   /*
6    * output: print hello world.
7   latexbegin{
8           This is embeded latex code.
9           End!
10  }latexend
11   */
12  int main(){
13          cout<<"Hello      World."<<endl;
14      return 0;
15  }
```

Algorithm 1: below the code
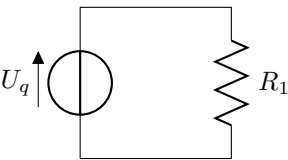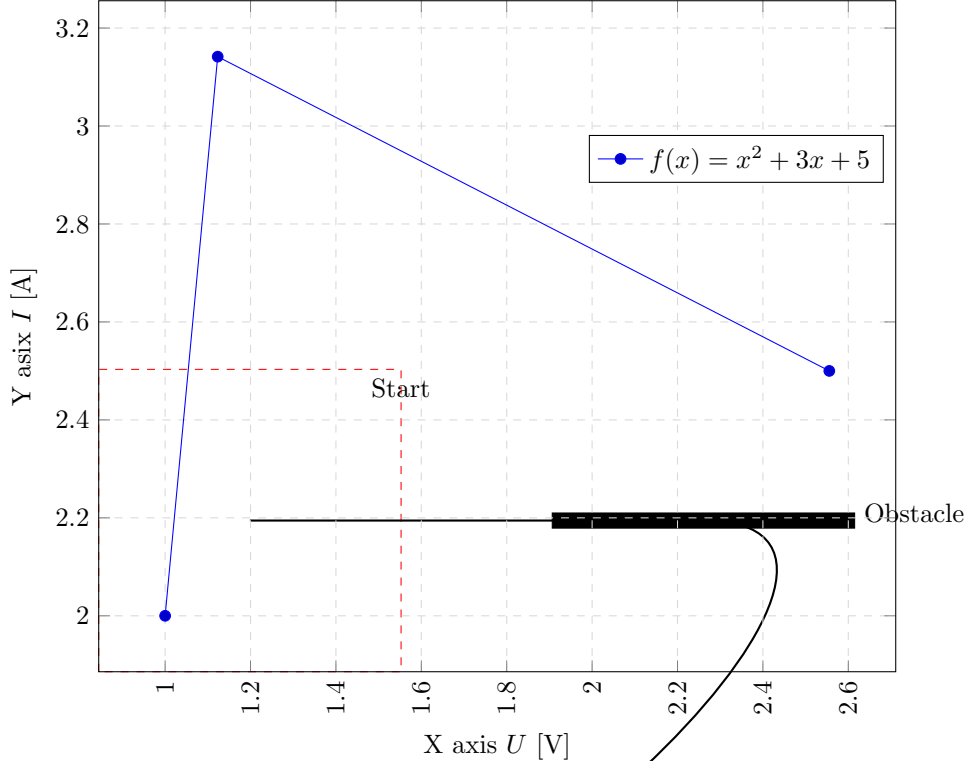
I'm refering to the Listing 2, end.

Figure 1: My autogenerated plot.

$f(x) = x^2 + 3x + 5$

Y asix I [A]

X axis U [V]

Start

Obstacle

Point of interest

$fuckyou$ hello¡F5¿

Table 1: Autogenerated table from .csv file.

$Value1$	$Value2$	$Value3$
A	V	T
1	2	4
1.12	3.14	34
2.56	2.50	23

this is footnote[1]. this is footnote2[2]. i'm referring to previous footnote2. i'm referring to first footnote1.

Table 2: My Table

1	2	3
a	b	c

Table 3: mytable2

Some	actual	content
prettifies	the	table
as	wel	as
using	the	booktabs package

---

[1] Hello footnote
[2] Hello footnote

Contents

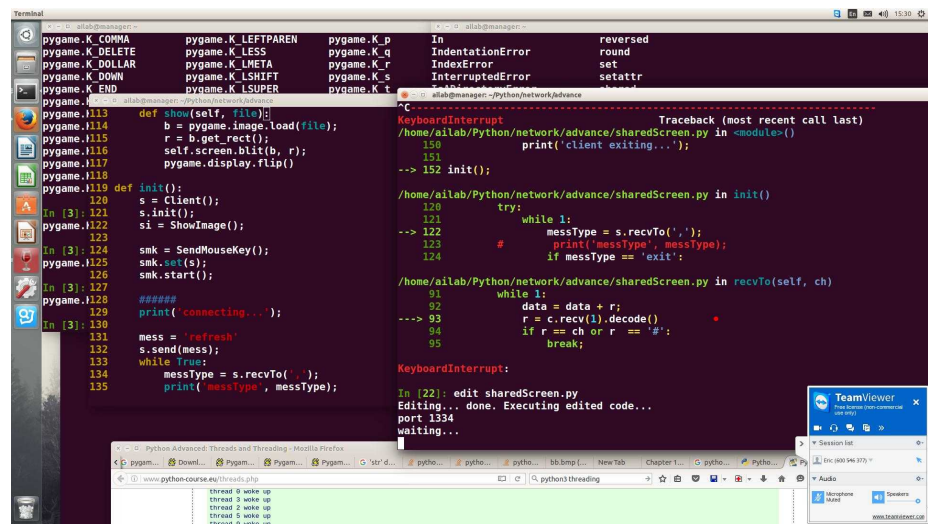Figure 2: dummy figure

Figure 3: A tmp jpg what?

Figure 4 show a tmp jpg.
Figure 3 show a tmp jpg.

$$f(x) = x^2 y = ax^2 + bx + c$$

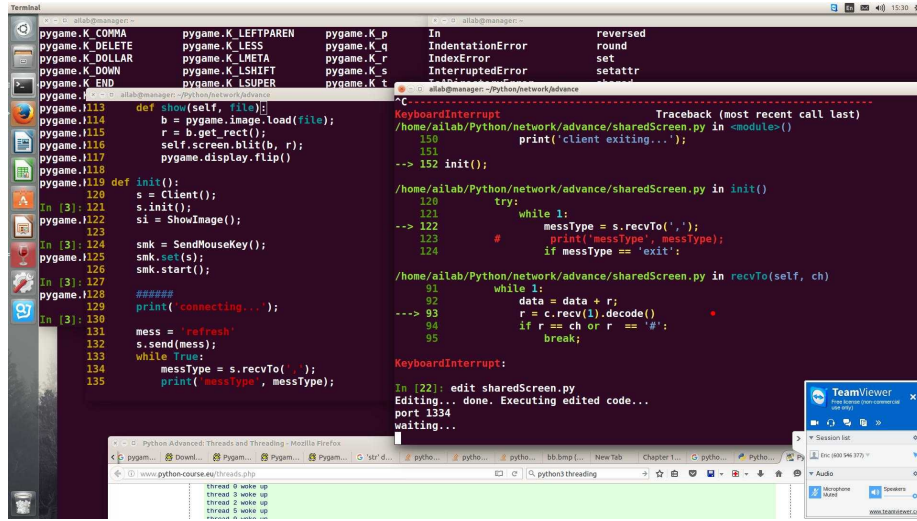$$1 + 2 = 3$$

$$1 + 2 = 3 \tag{1}$$
$$1 = 3 - 2 \tag{2}$$

1

Figure 4: A tmp jpg

$$f(x) = x^2 \tag{3}$$

$$g(x) = \frac{1}{x} \tag{4}$$

$$F(x) = \int_b^a \frac{1}{3} x^3 \tag{5}$$

$$IntF(x) = \int_a^b \frac{1}{3} x^3 \tag{6}$$

$$ClosedIntgral(x) = \oint_D F ds \tag{7}$$

$$c(x) = \frac{f(x)}{\frac{4}{3}} \tag{8}$$

$$\left(d(x) = \frac{1}{\sqrt{x}} \right) \tag{9}$$

$$\begin{bmatrix} 1 & 0 & 3 \\ 1 & 0 & 3 \\ 2 & 4 \end{bmatrix} \tag{10}$$

$$\lambda^2 \alpha \beta \theta \tag{11}$$

adfadfadf
zverqwerqewraf

The formula is $f(x) = x^2$, for example.

1 section1

Hello World!
adf adf
afd a f

1.1 section2

sub section

new paragraph some text. next line

new hello New method:

```
1  #include<iostream>
2  #define Trace(m) cout<<#m"="<<(m)<<endl;
3  using namespace std;
4  //this is a basic cpp template
5  /*
6   * output: print hello world.
7  latexbegin{
8          This is embeded latex code.
9          End!
10  }latexend
11  */
12  int main(){
13          cout<<"Hello       World."<<endl;
14      return 0;
15  }
```

Algorithm 2: below the code

4

Table 4: Dummy table

Table 5: Dummy2 table

hello rnadom citation [1] bibtex

List of Figures

List of Tables

List of Algorithms

biblatex references:
bibtex references:

References

[1] J. Doe, *The Book without Title*. Dummy Publisher, 2100.