

# Coding Journey Report

Data visualizations and summaries for exploring a coding journey.

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Task name: Question 1

Typing Time: 5 minutes 10 seconds

Total time spent: 10 minutes 51 seconds

Average typing speed: 35 character(s)/minute

Number of lines: 26

Number of characters: 722

Number of time points: 63 (Logged at 5 seconds)

Interactive version of this report is [available here](#).

Question:

Lab question

1.Explain the order of constructor and destructor invocation in oop with example.

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## Final Code

If the code contains more than one file, they are concatenated and shown.

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==+==

FILE: Main.cpp

==+==

```
/* Order of constructor and destructor invocation */
#include <iostream>
using namespace std;

class ab{
    int x;
public:
    ab(int a)
    {
        x=a;
        cout<<"Constructor "<<x<<" created."<<endl;
    }
    ~ab()
    {
        cout<<"Constructor "<<x<<" destructed."<<endl;
    }
};

int main() {
    ab a(1),b(2),c(3);
    return 0;
};
/*
```

Here, we can see that the constructor is executed in the order it is written. a(1) then b(2) then c(3) but the destructor is called in reverse order of constructor.

The constructor which is created last is destructed first and the constructor which is created first gets destructed last.

constructor -> a->b->c

destructor -> c->b->a

\*/

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## Final Execution Output

Output of the most recent code execution.

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```
Constructor 1 created.
Constructor 2 created.
Constructor 3 created.
Constructor 3 destructed.
Constructor 2 destructed.
Constructor 1 destructed.
```

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## Most Common Error

The most common error that occurred during the coding process; "null" (if any) indicates no errors.

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### STDERR:

Main.cpp: In destructor 'ab::~~ab()':

Main.cpp:14:30: error: 'x' was not declared in this scope

```
14 |         cout<<"Constructor "<<x<<" destructed.";
    |                               ^
```

### EXCEPTION:

Error: Command failed: timeout 7 g++ -o Main Main.cpp

Main.cpp: In destructor 'ab::~~ab()':

Main.cpp:14:30: error: 'x' was not declared in this scope

```
14 |         cout<<"Constructor "<<x<<" destructed.";
    |                               ^
```

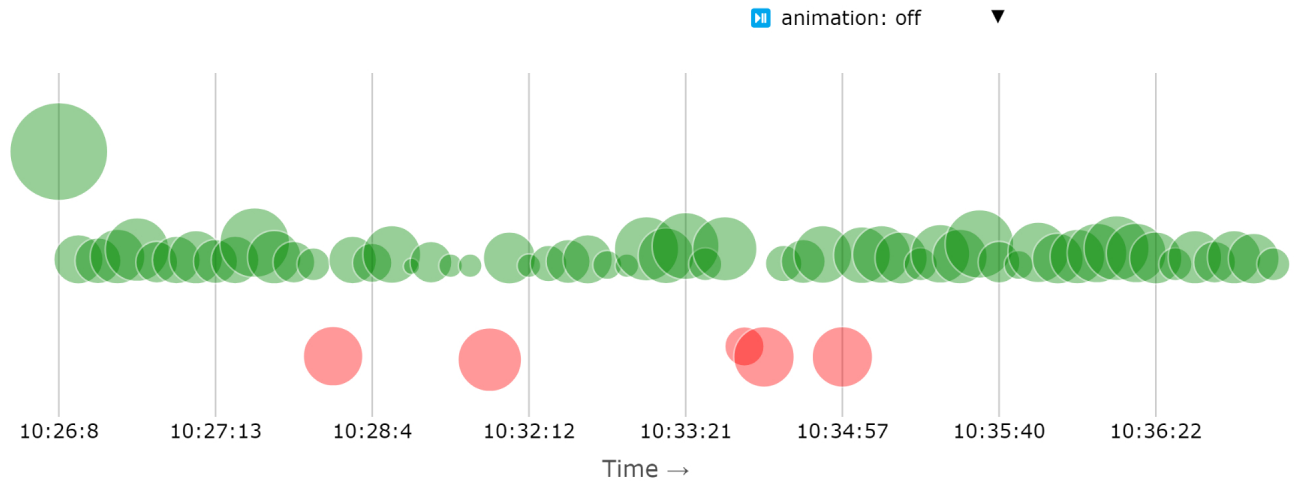
## Effort Summary

Active durations while working on the task, shown as green bars.



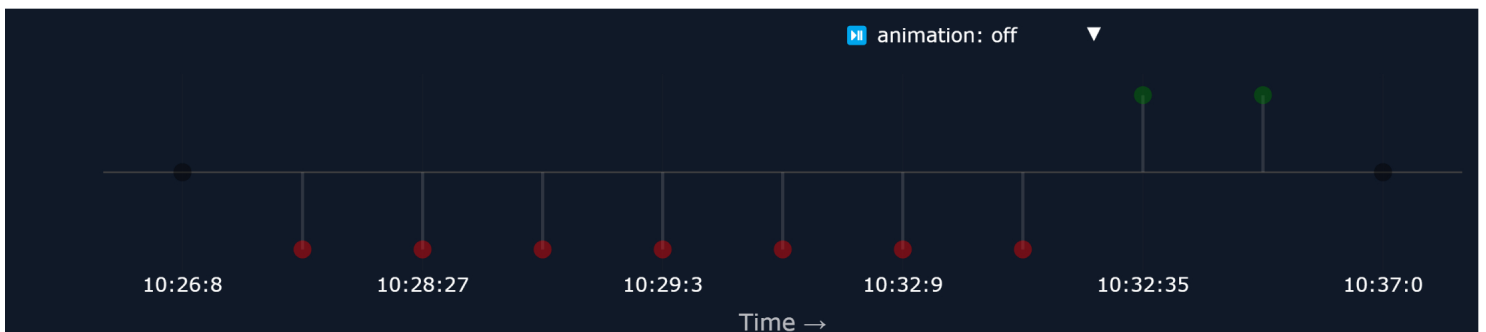
## Text Added or Removed Over Time

Green and red circles show text add and removed; size of the circle shows change in the number of characters.



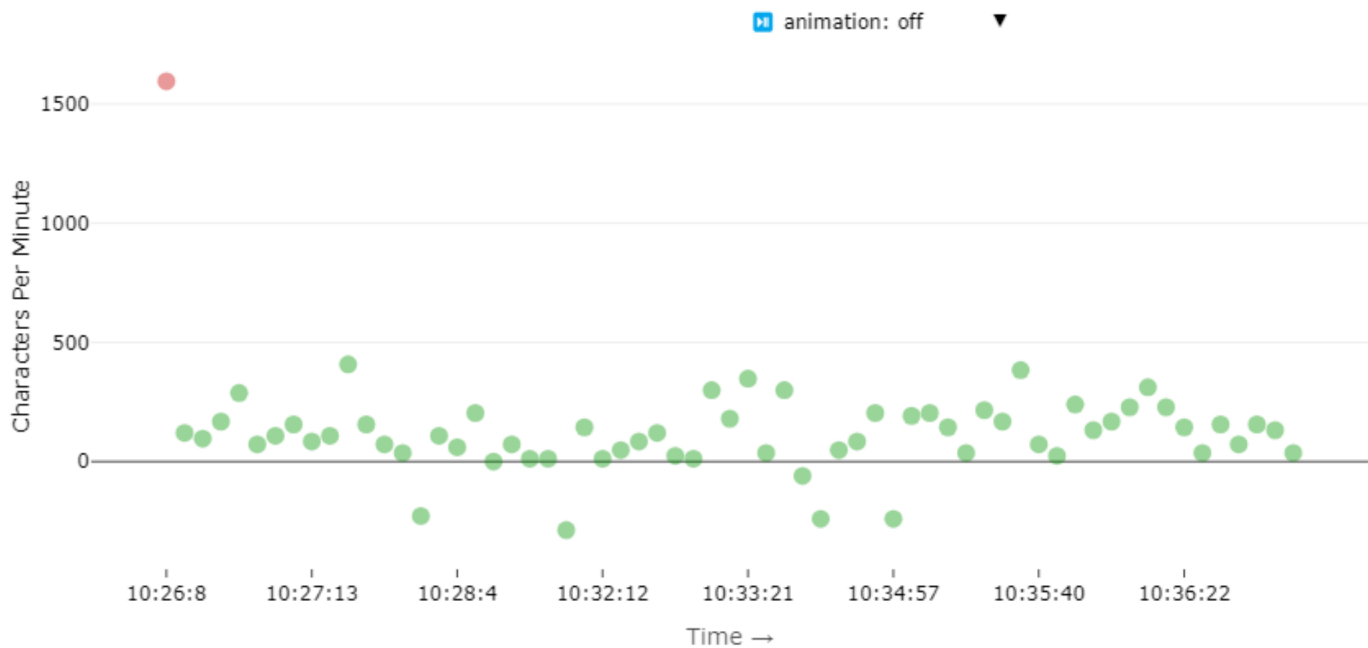
## Code Executions

Green and red dots correspond to successful and failed executions.



## Typing Speed

Typing speed can be negative when text is deleted



### Edited Line Locations (inactive durations not shown)

Each edited line block is assigned a color; highlighted bars show the line(s) edited at that time point.

