C++ STL String

August 31, 2019

[1]:
```cpp
#include <iostream>

using namespace std;
```

[2]:
```cpp
// Utility Function
void print(string s) {
    cout << s << endl;
}
```

0.1 Append character to a String

[3]:
```cpp
string name = "Kushashw";
name.push_back('a');
```

[4]:
```cpp
print(name);
```

```
Kushashwa
```

[5]:
```cpp
// Another way to append to a string - O(N) time
string name_sample = "Kushashw";
name_sample = name_sample + 'a';
print(name_sample);
```

```
Kushashwa
```

0.2 Insert into a String

[7]:
```cpp
string s = "kushshwa";
s.insert(s.begin()+4, 'a');
print(s);
```

```
kushashwa
```

[8]:
```cpp
s = "kushshwa";
s.insert(s.end()-4, 'a');
print(s);
```

```
kushashwa
```

0.3 Erase from a String

```
[9]: s = "kushaAshwa";
     s.erase(s.begin()+5);
     print(s);
```

kushashwa

```
[10]: s = "kushaAshwa";
      s.erase(s.end()-5);
      print(s);
```

kushashwa

0.4 String length and accessing individual elements

```
[11]: s = "kushashwa";
      int len = s.size();
      cout << len;
```

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```
[12]: int length = s.length();
      cout << length;
```

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```
[13]: cout << s[0];
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[14]: // C++ string does not have a terminator like \0
      for(int i=0; i<s.length(); i++) {
          cout << s[i] << " ";
      }
```

k u s h a s h w a