

C02100

Note Title

30-08-2018

Aug 30, 2018

Last Class:-

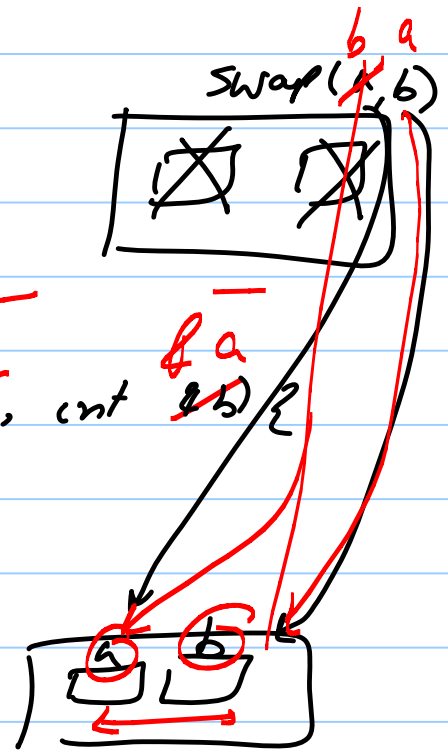
Pass  
↳ ~~Call~~ by Value  
Call by Reference  
pass

void swap(int ~~a~~, int ~~b~~)

}

a = 10  
b = 15

```
int main() {  
    swap(a, b)  
}
```



string:- data type

# include <iostream>

# include <string>

single line  
//  
/\*  
\*/  
commented

int main() {

string s = "Hello";

char c1 = s[0];

cout << c1;

char c2 = s.at(1);

cout << c2;

sequence of characters

s[0] s[1] s[2] ... s[4]

function/method  
{} 3

// 4

// 5

string s = "Hello";  
char c = s[0];

~~s = "Hello";~~

~~cout << (int) c;~~

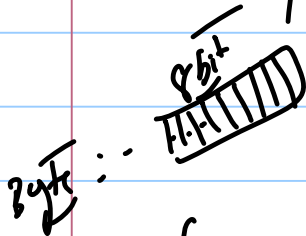
cout << c << endl; // P

cout << (int) c << endl; // 72

ASCII →

0 - 127

'a', 'b', 'c', 'd'



c = 'a';  
c++;  
cout << c;

char c = 'a';  
cout << c;  
if ('a' > 'A') {  
}

int | char  
0 - 32  
33 - 127  
128 - 255  
256 - 511  
512 - 1023  
1024 - 2047

const

~~const~~

void printGreetings(string str) {

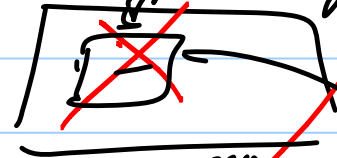
for (int i=0; i<3; i++) {

→ cout << str[i] << endl;

printGreetings(str)

~~print~~  
}

3  
→ str = "hi";



int main() {

string str = "This is a really

long long by string;

3

→ printGreetings(str);

→ cout << str;

3

printGreetings ("COLLOU"); ✓



String functions:-

String s = "Hi";  
s.append(" there");  
cout << s; // Hi there

string str = "Hi";

string str1 = ~~Hi~~ "HiHi";

if (str.compare(str1)) {

} else {

}

~~str~~

functions:-

s.append(str);

s.compare(str);

if (s > str) | if (s == str)

> 0      = 0      < 0  
          if (s < str)

str = "Hi";

str1 = "HiHi";

~~if str < str1~~

Get there str.insert(2, "Hello"); → Hello there

s.substr(1, 2)  
s.substr(2);

```
string str = "hi";  
str.append(" there");  
str.erase(1, 2);  
cout << str; // h there  
str.find("th"); // 3  
str.find("e"); // 5  
str.rfind("e"); // 7  
str.rfind("t"); // 3  
str.find("Hello");
```

//str::npos

```
if (str.find("Hello") == str::npos) {  
    str.replace(1, 2, "Hello");  
}
```

1. s.append(str)
2. s.compare(str)
3. s.erase(index, length)
4. s.find(str)
5. s.insert(index, str)
6. s.length() or s.size()
7. s.replace(index, lenStr)
8. s.substr(start, length)  
s.substr(start)

3

Hello there

## String Operators: -

① +

```
string s1 = "Nik";
```

```
s1 += "ok";
```

```
cout << s1;
```

```
s1 += = s1 + "ok";
```

~~string s2~~

```
cout << s1; // Nikok
```

~~cout << s2; // Nikok~~

②

```
string s2 = "Test"; // =, !=, <, <=
```

```
if (s1 > s2)
```

```
// > =, >
```

```
string name =
```

```
"Thomas Edison";
```

```
if (name.find("Edi"))
```

```
!= string::npos)
```

```
name.erase(7, 6);
```

\* Strings are "mutable"

```
s1 = "Nikola";
```

```
s1.append("Test");
```

```
cout << s1; // NikolaTest
```

```
s1.erase(3, 5)
```

```
s1[0] = '@';
```

```
cout << s1; // @ikolaTest
```

---

# include <string.h> →

str = "Nikola"

strcmp(str, suffix)

suffix = "ola";

startswith(str, suffix)



~~int c = 20;~~  
~~str = "hi";~~

Standard Library

~~integerToString(int)~~

~~str~~ str

Function:-

int c = ~~20~~; 46; 97;  
String str = integerToString(c);  
cout << str; // 46  
c.append("hi"); 97hi  
cout << str; // ~~20~~ 46  
String str = c;  
str.append("hi"); // ahi

integerToString(int)  
realToString(double)  
StringToInteger(str)  
StringToReal(str);