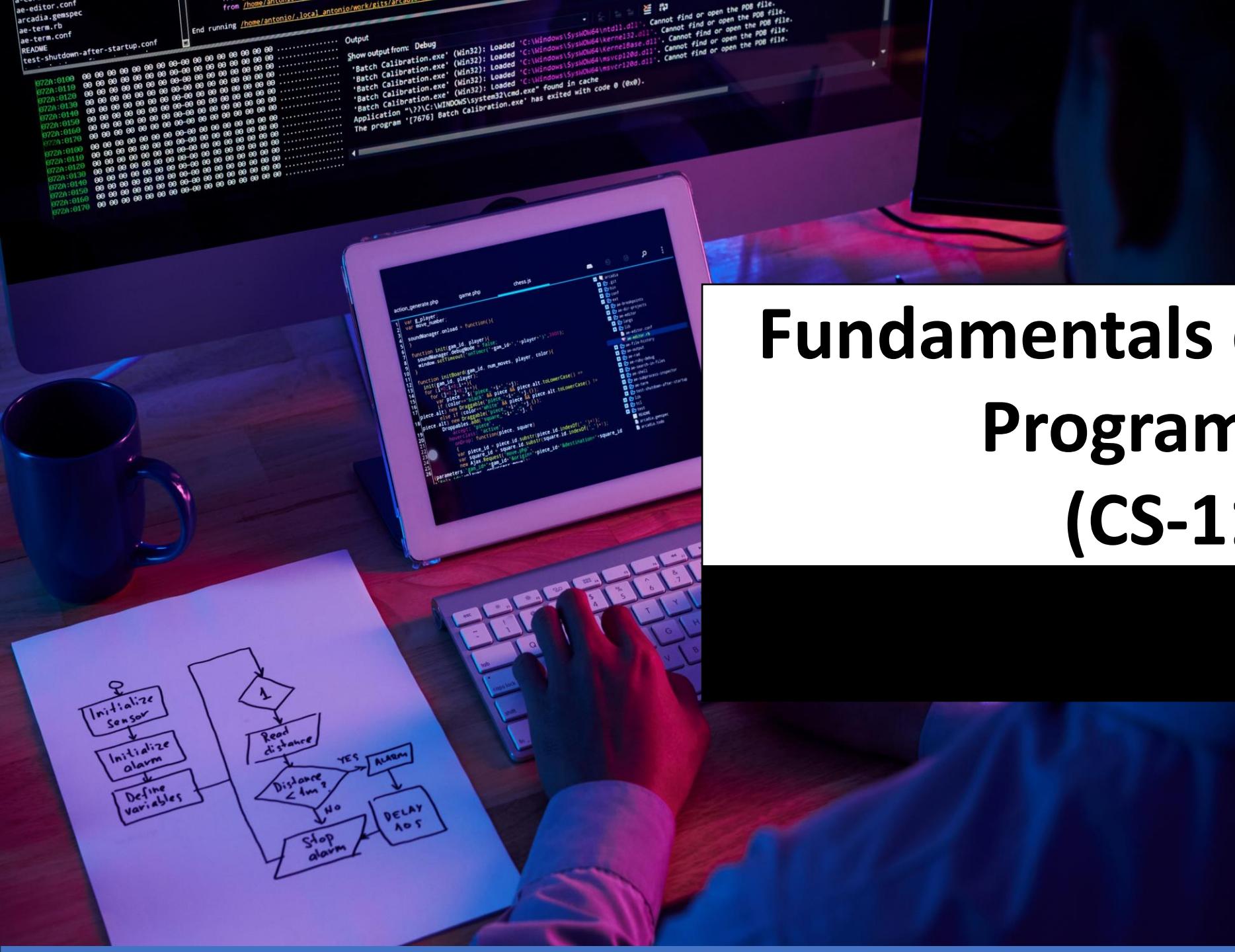


# Fundamentals of Computer Programming (CS-110)

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# Size()

```
#include <iostream>
#include <string>
int main()
{
    std::string str = "Hello, World!";
    int length = str.size(); // Returns the size of the string, i.e. 13
    std::cout << "The length of the string is: " << length << std::endl;
    return 0;
}
```

# Strcpy()

```
#include <iostream>
#include <cmath>
int main() {
    char source[] = "Hello, World!"; // Source string
    char destination[20]; // Destination character array
    std::strcpy(destination, source); // Copy the source string to the
destination
    std::cout << "Source string: " << source << std::endl;
    std::cout << "Copied string: " << destination << std::endl;
    return 0;
}
```

# compare()

```
#include <iostream>
#include <string>
int main() {
    std::string str1 = "apple";
    std::string str2 = "banana";
    int result = str1.compare(str2);

    if (result == 0) {
        std::cout << "The strings are equal." << std::endl; }

    else if (result < 0) {
        std::cout << "The string str1 is less than str2." << std::endl; }

    else {
        std::cout << "The string str1 is greater than str2." << std::endl; }

    return 0;
}
```

# To\_string()

```
#include <iostream>
#include <string>
using namespace std;
int main() {
    int num = 42;
    string str = to_string(num);
    cout << str << endl;
    return 0;
}
```

# stoi() and stod()

```
#include <iostream>
using namespace std;
int main() {
    string str = "123";
    int num = stoi(str);
    cout << num << endl;
    return 0;
}
```

```
#include <iostream>
using namespace std;
int main() {
    string str = "3.14";
    double num = stod(str);
    cout << num << endl;
    return 0;
}
```

# Replacement()

```
#include <iostream>
#include <string>
using namespace std;
int main() {
    string str = "Hello, World!";
    str.replace(7, 5, "Universe"); // Replaces the substring "World" with
    "Universe"
    cout << str << endl;
    return 0;
}
```

# substr()

```
#include <iostream>
#include <string>
int main() {
    std::string str = "Hello, World!";
    std::string substr = str.substr(7, 5); // Extracts "World" from the original
                                         string
    std::cout << "The substring is: " << substr << std::endl;
    return 0;
}
```

# substr()

```
#include <iostream>
#include <string>
using namespace std;
int main() {
    string str1 = "Hello";
    string str2 = " World!";
    string result = str1 + str2;
    cout << result << endl;
    return 0;
}
```



# Acknowledgment

- Content of these slides are taken from:
  - <https://www.geeksforgeeks.org/>
  - <https://www.tutorialspoint.com/>
  - <https://www.programiz.com/>
  - <https://www.w3schools.com/>