

→ Filing

What: resource for recording data on computer.

Why: Arrays & variables store data temporarily.

Files store data permanently.

- Flow of File handling

1. Import Library
2. Create object/variable
3. perform action: Read, write, etc
4. Close the file.

1. Writing to a file. (ofstream)

//1. Import Libraries

//2. Variable

```
ofstream myFile("A.txt");
```

//3. Write data to file (Action)

```
myFile << "Hello Filing" << endl;
```

```
myFile << "We are doing good!" << endl;
```

//4. Close the file

```
myFile.close();
```

⇒ Explain the code

2. Reading Data from file (ifstream)

//1. Import Libraries: <fstream>

//2. Create variable

```
ifstream ReadFile("A.txt");
```

//3. Action: Read data from file

// Load the file in string variable

```
string text = "";
```

// a. Reading a word

```
ReadFile >> text;
```

```
cout << text;
```

// b. Reading a line

```
getline(ReadFile, text);
```

```
cout << text << endl;
```

// c. Read all lines of the file

```
while (getline(ReadFile, text)) {
```

```
    cout << text << endl;
```

```
}
```

// 4. Close the file

3. Opening a file (Exception handling)

//1. Include Libraries

//2. Create an object

```
ifstream file("A.txt");
```

```
if (!file)
```

```
    cout << "File doesn't exist" << endl;
```

```
else
```

```
    cout << "File Found" << endl;
```

//3. Close file

4. Append data to file

//1. Include Libraries

//2. Create an object: write mode

```
ofstream file("A.txt", ios::app);
```

// Do create a scenario for append use case

// before applying app, append the data

//3. Action

```
file << "This is line no 1" << endl;
```

//4. Close file

5. Array to file

//1. Include Libraries

//2. Create object: write : ofstream

```
ofstream file("A.txt", ios::app);
```

//3. Action

```
string arr[] = {"first", "second", "third"};
```

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

```
    file << arr[i] << endl;
```

```
}
```

//4. Close file

```
file.close();
```

```
cout << "Executed Successfully" << endl;
```