

Synthesized Member Functions Exercises

Synthesized default constructor

- What is a default constructor?
- In what circumstances does the compiler synthesize a default constructor?
- What does this synthesized default constructor do?

Synthesized copy constructor

- In what circumstances does the compiler synthesize a copy constructor?
- What does this synthesized copy constructor do?

Synthesized copy constructor

- In what circumstances does the compiler synthesize an assignment operator?
- What does this synthesized assignment operator do?

Drawbacks of synthesized functions

- Give some examples of when allowing the compiler to synthesize special member functions can have undesirable results
- Suggest how to avoid these issues

Rule of Three

- What is the "Rule of Three"?
- Give an example where the Rule of Three would be helpful

Synthesized Special Member Functions

- Write a program which demonstrates the use of synthesized special member functions
- Add comments to your program showing the code that the compiler would generate when synthesizing these member functions