

Template Specialization

Templates define the behavior of families of classes and functions.

- Often it is necessary that special types, non-types, or templates must be treated specially.
- You can fully specialize templates; class templates can also be partially specialized.
- The member and member functions of specialization don't have to be identical.
- General or primary templates can coexist with partially or fully specialized templates.



The compiler prefers fully specialized to partially specialized templates; partially specialized templates to primary templates.

Primary Template

The primary template must be at least declared before the partially or fully specialized templates.

- If the primary template is not needed, a declaration is fine.

```
template <typename T, int Line, int Column>  
class Matrix;
```

```
template <typename T>  
class Matrix<T, 3, 3>{};
```

```
template <>  
class Matrix<int, 3, 3>{};
```

templateSpecialization.cpp