Assignment 7.1 Linearization I

Consider the following inheritance expressions: \( A(B, C) \quad B(E, G) \quad C(D, F) \quad D(G) \quad F(E) \)

Give the linearization order for \( A \) of the following methods:

1. Leftmost Preorder Depth-First Search with Duplicate Cancelation
2. C3

Assignment 7.2 Linearization II

Consider the following classes: \( A(B, C) \quad B(D, E) \quad C(F, G) \quad D(G) \quad E(F) \)

Give the linearization order for \( A \) of the following methods:

1. LPDFS with Duplicate Cancellation
2. Reverse Postorder Rightmost DFS
3. C3

Assignment 7.3 (Multiple) Inheritance

1. Consider the following C++-Classes:

```cpp
class A { public: int a; virtual void f(); }
class B : public A { public: int b; virtual void f(); }
class C : public B { public: int c; virtual void f(); }
```

Draw a memory representation diagram for a C-Object, and the virtual table diagram for class C!

2. Consider the following C++-Classes:

```cpp
class A { public: int a; void f(); }
class B : public A { public: int b; void f(); }
class C { public: int c; void f(); }
class D : public C, public B { public: int d; void f(); }
```

Draw a memory representation diagram for a D-Object!