```
PROGRAM P
  USE M
  CALL S1
  CALL S2
END PROGRAM P
```

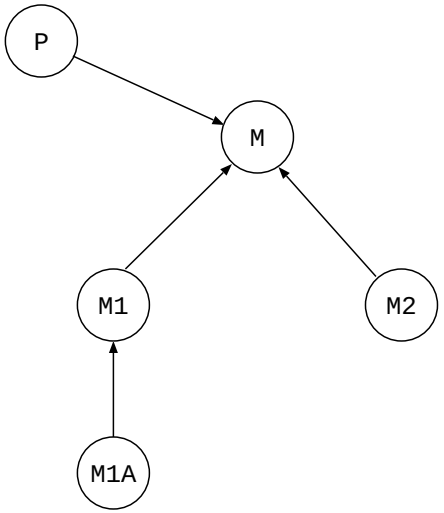
```
MODULE M
  SEPARATE INTERFACE
    SUBROUTINE S1 ...
      ...
    END SUBROUTINE S1
    SUBROUTINE S2 ...
      ...
    END SUBROUTINE S2
  END INTERFACE
END MODULE M
```

```
SUBMODULE (M) M1
  SUBROUTINE T1
  END SUBROUTINE T1
END SUBMODULE M1
```

```
SUBMODULE (M) M2
  IMPLEMENTATION S2
  SUBROUTINE S2 ...
    CALL S1
    CALL T1
  END SUBROUTINE S2
END SUBMODULE M2
```

```
SUBMODULE (M1) M1A
  IMPLEMENTATION S1
    CALL T1
    CALL S2
  END SUBROUTINE S1
END SUBMODULE M1A
```

DEPENDENCY DAG:



An allowed compilation order:

M
M2
P
M1
M1A