

```

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

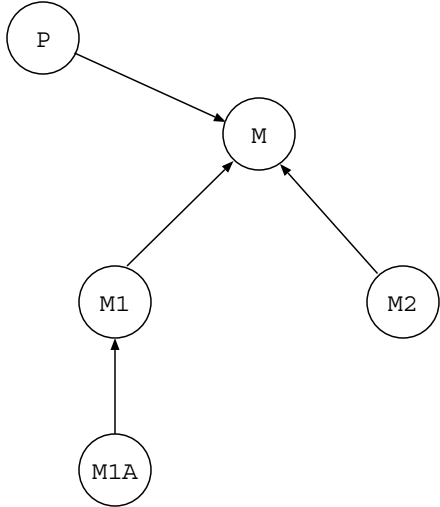
```

```

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

```

DEPENDENCY DAG:



An allowed
compilation order:

- M
- M2
- P
- M1
- M1A