```
┌─────────────────────────────┐
│        <<interface>>        │
│  DungeonControllerInterface │
├─────────────────────────────┤
│                             │
│ + playGame(Game game)       │
│                             │
└─────────────────────────────┘
               △
               ╎
               ╎
┌─────────────────────────────┐
│     DungeonController       │
├─────────────────────────────┤
│ - appendable:Appendable     │◆──────────────┐
│ - scanner:Scanner           │               │
├─────────────────────────────┤               │
│                             │               │
└─────────────────────────────┘               │
                                              │
┌────────────────┐   ┌─────────────────────┐   ┌────────────────────┐
│     PickUp     │   │    <<interface>>    │   │       Shoot        │
├────────────────┤   │  dungeonCmdInterface│   ├────────────────────┤
│                │   ├─────────────────────┤   │ - bullet:int       │
├────────────────┤ ▷ │                     │ ◁ ├────────────────────┤
│                │   │ + go(Game game)     │   │                    │
└────────────────┘   │                     │   └────────────────────┘
                     └─────────────────────┘
                              △
                    ┌─────────┴─────────┐
           ┌────────────────┐   ┌────────────────┐
           │      Move      │   │      End       │
           ├────────────────┤   ├────────────────┤
           │ - direction:Direction │             │
           ├────────────────┤   ├────────────────┤
           │                │   │                │
           └────────────────┘   └────────────────┘
```

TestName I/o input	Expect out put
M N	Player Move North
M S	Player Move South
M W	Player Move West
M E	Player Move North
M (invalid direction)	Player can't move (waste a turn)
End (if player reach the exist)	Exist with treasure win
End (if player not reach the exist)	Print text can't exist
Get killed by monster	lose
S 1 (without monster)	You shoot an arrow into the darkness
S 1 (with monster)	Monster get Killed
S 1000 (with/without monster)	You are out of arrows, explore to find more (waste a turn)
Q/q/quit	Game end
P (with arrow)	What? Arrow You pick up an arrow
P (with treasure)	What? ruby You pick up a ruby
P (without treasure)	Print pick up nothing (waste a turn)

appendable error	I/o exception
PlayGame(game)	Normal game
PlayGame(null)	illegalArgumentException