

1. Make three classes:

- `Phone` → has `model` and `battery` (default 100).
- `SmartPhone` → inherits from `Phone` and adds operating system.
- `GamingPhone` → inherits from `SmartPhone` and adds `cooling_system`.  
Add a method `start_game(name)` that prints  
👉 `"Playing <name> on <model>"`.

2. Make a class `MobilePhone` with:

- `model` (public)
- `__battery` (private, default 100)  
Add methods:
- `use()` → reduce battery
- `charge()` → increase battery (max 100)
- `get_battery()` → show battery

Show that you **can't access `__battery` directly**.