

Q1 → What is object?

Ans = Object is some think which has state, behaviour, Identity and responsibility.

Object	Attribute & Values
① behaviour	Response given to outside world
② Identity	Values associate with objects
③ Responsibility	State and object

2. Write the definition of state, behaviour, Identity, and responsibility

- ① → car  
 • color  
 • battery level  
 • company  
 • fuel level  
 • speed ↑  
 • break  
 • automatic  
 • gear

- ② → car (behaviour)  
 • AC  
 • seat heat  
 • music system  
 • seats  
 • sports mode

3. ~~Car~~ identity

- car number
- Chassis number
- model number
- engine number
- ~~owner~~ owner name

4. ~~Car~~ responsibility

- comfort level
- safe zoom
- effectively

2. ~~Bike~~ state

- color
- Company
- Speed + -
- gear
- Fuel tank

② ~~Bike~~ behaviour

- stand
- halton
- light
- depeak
- seat

3. ~~Bike~~ → Identity

- model number
- Englin number
- Owner number

④ ~~Bike~~ → responsibility

- rules follow
- safe not.
- save fuel.

③ Fan → state

- color
- number of blades
- Company
- power of fan
- rotating

③ Fan → behaviour

- speed incdec / decinc
- rotate / dieoff
- Power of fan

## **For Identity**

- serial number
- model number
- brand name

## **For Responsibility**

- calling
- quick response

## **④ [LED] $\Rightarrow$ State**

- value
- display size
- company
- screen touch
- remote

## **[LED] $\Rightarrow$ behaviour**

- brightness level + -
- volume + -
- call phone
- charge mode
- app

## **[LED] = identity**

- model number
- serial number
- color (red, white, black)

## **LED $\Rightarrow$ responsibility**

- quick response
- availability

## **⑤ [Phone] $\Rightarrow$ state**

- price
- company
- screen size
- battery mAh
- screen

## **[Phone] $\Rightarrow$ behaviour**

- brightness level
- ~~blue~~ blue light
- message send / receive
- silent
- take photo
- calls
- play music

## Phone Identity

- Model number
- Serial number
- Color (Red, Blue, Green)

## Phone Response Ability

- Hidden
- Security
- ~~Stress~~

## ⑥ AC → Side

- color
- Price
- size
- Company name

## AC = behavior

- Speed + -
- cooling AIR
- Heat AIR
- Cooling
- Fan on / OFF
- sleep mode

## Identity: AC

- model name
- serial number
- Air Conditioner

## Responsibility

- quick response
- remove Heating
- comfortable

## ⑦ Banking → Side

- Active account
- withdraw
- deposit
- UPI / Credit card

## Banking Behavior

- Account details
- withdraw
- deposit
- transaction
- check balance

## Identity: Banking

- ATM card
- Branch name
- UPI Credit Card

## Responsibility (Banking)

- save Money
- allows deposit
- manage account records

⑥ Student

~~behaviour~~  
State

- Good behavior state
- bad state
- respect
- Responsible
- Disobedient

Identifying Student

- Name
- Roll no.
- Class section A/B
- Registration number

⑦

Washing machine = State

- Pulse
- Water filling
- Automatic
- Spinning drying

Identify = ~~State~~ washing machine

- Model no.
- Serial no.
- Brand name

Student = Behaviour

- Attend well
- Homeworks
- Follow rules
- ABK Question
- discipline

Responsibility

- follow rules
- work completed
- Attended regular
- Discipline

Washing machine = Behaviour

- Fill water
- Speed + 1
- Power on off
- Timer
- Rotated
- Dryer

Responsibility

- save water and electricity
- wash clothes properly

10 (Laptop)  $\Rightarrow$  State

- On/Off
- Color
- Screen lock
- Model
- Charging
- Sleep

• Laptop  $\rightarrow$  behavior

- On/Off
- Volume + -
- Internet connection
- Bluetooth
- Update software
- Screen settings

Identify = Laptop

- Brand name
- Serial number
- Model name
- Processor type
- RAM

Responsibility = Laptop

- Hide them
- Security
- Protect data state

## 1. ABSTRACTION

1 Abstraction = selective ignorance

2. Abstraction = selective ignorance

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5.  $\Rightarrow$  Abstraction  $\Rightarrow$  selective ignorance

6.  $\Rightarrow$  Abstraction  $\Rightarrow$  selective ignorance

7. Abstraction = selective Ignorance

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2. Encapsulation  $\Rightarrow$  Process of Binding & Hiding  
state and behaviour by default

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↳ Inheritance → Process of already define class  
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① Polymorphism → Some message given to ~~generalized~~  
generalize thing for same behavior  
but implemented differently

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thing for same behavior by  
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Q-2  $\Rightarrow$  Polymer Phism  $\Rightarrow$  some message given to generalized thing for same behaviour but implement differently

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