#1. Loading required pacakage

library(R6)

#2. Creating class template/object generator with name "Football\_generator"

#three private data member

#three public data member.

Football\_Generator<-R6Class("template",private=list(Player\_Name='NA',Player\_club='N',

Player\_salary='NA'),

public=list(set\_name=function(x){private$Player\_Name=x},

set\_club=function(x){private$Player\_club=x},

set\_salary=function(x){private$Player\_salary=x}

)

)

Console output:

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> Football\_Generator<-R6Class("template",private=list(Player\_Name='NA',Player\_club='N',

+ Player\_salary='NA'),

+ public=list(set\_name=function(x){private$Player\_Name=x},

+ set\_club=function(x){private$Player\_club=x},

+ set\_salary=function(x){private$Player\_salary=x}

+ )

+ )

#3.creating two new object and assigning value to prive data member

#with public function

Footbaal\_object1<-Football\_Generator$new()

Footbaal\_object2<-Football\_Generator$new()

Footbaal\_object1$set\_name("Raam")

Footbaal\_object1$set\_club("CSE")

Footbaal\_object1$set\_salary("100000000")

Footbaal\_object2$set\_name("Janaki")

Footbaal\_object2$set\_club("CSE")

Footbaal\_object2$set\_salary("1000000000")

Footbaal\_object1

Footbaal\_object2

Console output:

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<template>

Public:

clone: function (deep = FALSE)

set\_club: function (x)

set\_name: function (x)

set\_salary: function (x)

Private:

Player\_club: CSE

Player\_Name: Raam

Player\_salary: 100000000

> Footbaal\_object2

<template>

Public:

clone: function (deep = FALSE)

set\_club: function (x)

set\_name: function (x)

set\_salary: function (x)

Private:

Player\_club: CSE

Player\_Name: Janaki

Player\_salary: 1000000000

#Combining 4 and 5th question as both are dependent

#4. creating new class with three private data member

#5. Assigning value to private method using initialize

Movie\_Generator <- R6Class("Movie",private = list(Movie\_Name='NA',

protagonist\_Name='NA',

Movie\_Budget='NA'),

public = list(

initialize=function(x,y,z){

private$Movie\_Name=x

private$protagonist\_Name=y

private$Movie\_Budget=z

}

))

#assigning value using initialize method

Move\_gen <- Movie\_Generator$new("Raam",'YA','$500000')

Move\_gen

Console output:

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> Movie\_Generator <- R6Class("Movie",private = list(Movie\_Name='NA',

+ protagonist\_Name='NA',

+ Movie\_Budget='NA'),

+ public = list(

+ initialize=function(x,y,z){

+ private$Movie\_Name=x

+ private$protagonist\_Name=y

+ private$Movie\_Budget=z

+ }

+ ))

> Move\_gen <- Movie\_Generator$new("Raam",'YA','$500000')

> Move\_gen

<Movie>

Public:

clone: function (deep = FALSE)

initialize: function (x, y, z)

Private:

Movie\_Budget: $500000

Movie\_Name: Raam

protagonist\_Name: YA

#combining 6 and 7 as both are inter related

#6. vegwtable\_generator and two private data member

Vegetable\_Generator <- R6Class("vegetable",private = list(..Vegetable\_Name='NA',

..Vegetable\_Cost='NA'),

active=list(

Vegetable\_Name=function(x){private$..Vegetable\_Name=x},

Vegetable\_Cost=function(x){private$..Vegetable\_Cost=x}

))

vg <- Vegetable\_Generator$new()

vg

vg$Vegetable\_Name="Carrot"

vg$Vegetable\_Cost=55

vg

Console output:

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> Vegetable\_Generator <- R6Class("vegetable",private = list(..Vegetable\_Name='NA',

+ ..Vegetable\_Cost='NA'),

+ active=list(

+ Vegetable\_Name=function(x){private$..Vegetable\_Name=x},

+ Vegetable\_Cost=function(x){private$..Vegetable\_Cost=x}

+ ))

> vg <- Vegetable\_Generator$new()

> vg

<vegetable>

Public:

clone: function (deep = FALSE)

Vegetable\_Cost: active binding

Vegetable\_Name: active binding

Private:

..Vegetable\_Cost: NA

..Vegetable\_Name: NA

> vg$Vegetable\_Name="Carrot"

> vg$Vegetable\_Cost=55

> vg

<vegetable>

Public:

clone: function (deep = FALSE)

Vegetable\_Cost: active binding

Vegetable\_Name: active binding

Private:

..Vegetable\_Cost: 55

..Vegetable\_Name: Carrot

>