

# Assignment - I

→ Aim

Write a Java program to showcase classes, object creation, methods, constructors using student information as in below :-

→ Objectives

- 1) To study classes, objects, & creation of objects of a class.
- 2) To study methods, return a value from the method, & pass parameters to the method.
- 3) To study constructors & use of constructors.
- 4) To study different access specifiers & their use for encapsulation.

→ Theory

- 1) Define what is class & objectives with an example.

→ A class is a blueprint or a template that defines the variables & the methods common to all objects of a certain kind. It does not occupy memory until an object is created.

- An object is a basic unit of object-oriented programming & represents real-life entities. It is an instance of a class that has a state & behavior.
- Example - If Car is a class, then a Tesla Model 3 is object of that class.

2) Give the syntax/format to define methods in a class & give examples for parameter passing & returning a value from method.

→ A method is a block of code which only runs when it is called. You can pass data known as parameters, into a method.

Syntax: access-specifier return-type method-name(parameters);  
{ body of method }

Parameter passing - Sending values to a method

returning a value - Using the return keyword to the caller.

3) Write about the use of constructor with example.

→ A constructor is a special method that is used to initialize objects. It is called automatically when an object of a class is created.

It must have the same name as the class & no explicit return type.

Platform

Open source Java programming tool like  
Eclipse Editor / Netbeans IDE.

→ Conclusion

Thus, studied what are classes, object creation, methods, constructors, access specifiers.

⇒ FAQs

1) What is class & object?

A class is a logical entity while an object is a physical entity that occupies memory & possesses the properties defined by the class.

2) What is a constructor in Java?

A constructor is a block code similar to a method that is called when an instance of an object is created. Its main purpose is to initialize the state of an object.

3)

What is the default specifier & what is its scope?

The default access specifier is used if no specifier is mentioned. Its scope is limited to the same package only.

- 4) What are the different access specifiers?  
→ .  
• Private - Visible only within the same class  
• Default - Visible only within the same package  
• Protected - Visible within the same package & subclasses  
• Public - Visible anywhere outside and  
across packages. ~~but no interface~~

QUESTION

Stroide & seður er fullt  
ar ólögunum. Í því er löginn o. s. settur. A  
réttur er að ólögu til að ólögu. Það er ólögu  
hverfð. Vitrögð er oft eiginlegur & warann  
eiginlegur. Ólögu er

Sauði ré ekki ekki o. s. fullt  
at ekki er ólögu. Ólögu o. s. ekki ekki. A  
ávöxtur er ólögu. Hóllur í ferð. Hóllur  
er ólögu. Ólögu er ólögu. Ólögu er ólögu  
- ólögu. Ólögu er ólögu. Ólögu er ólögu

Ólögu & reiffrage. Fleinfab. Ólögu er ólögu  
hver hefur sé. reiffrage. reiffrage. Fleinfab.