Задача 1. Посочете термина, който съответства на описанието:

Термин	Описание	
Camel case	A naming convention to eliminate spaces in a name, but to ease readability with capitalization.	
Hierarchy	A group of related Java classes.	
Constructor	The method inside a class that runs when the class is compiled and ran	
Scopes	Sections of code that are enclosed inside a set of curly braces. {}	
	First letter uppercase and the first letter of each internal word capitalized. Example: SavingsAccount	
Final (constant) value	A named value that does not change	
	First letter lowercase and the first letter of each internal word capitalized. Example: studentFirstName	
import	A code statement in a Java class file that includes java code from another package or class.	
keyword	A word that has a special function in the Java language, and cannot be used as names for classes, methods, or variables.	
Abstract method	A special kind of method that is a template for an object.	
parameters	Values that are sent into a method or constructor to be used in a calculation or substituted with values from the class.	
Access modifiers	Keywords used to specify the accessibility of a class (or type) and its members. Ex: public, private, protected, default	
	A block of code inside a class that is used to change or access information about the class.	
Primitive types	The group of Java data types that do not use the keyword new when declared or initialized. They store the value in the same place in memory as the variable name.	
byte	The smallest java primitive type (1 byte) that can hold an integer value.	
long	This data type (8 bytes) is the largest integer type.	

Camel case, snake_case	The formatting and naming standards that most programmers follow.	
integer	This Java primitive data type (4 bytes) can hold integer values.	
double	This Java primitive data type (8 bytes) is the largest primitive that can hold a decimal value.	
initialization	When a variable is assigned a value for the first time.	
float	This Java primitive data type (4 bytes) can be initialized with a decimal number preceding letter f.	
char	A java primitive data type (2 bytes) that can hold single character values. Example: "a", "#", or "X"	
scope	Used to describe the block of code where a variable exists in a program. A block of code is denoted by {}.	
short	A Java primitive data type (2 bytes) that holds integer numbers within a shorter range than an int.	
bool	A one-bit java primitive type that can hold the value true or false.	
concatenation	Joining multiple String objects together.	
Wildcard chars	Specific characters that are preceded by a \ character. When evaluated, the special character is evaluated as a special function, such as tabs, newlines, etc.	
Ternary operator	A shorthand form of an if/else statement.	
Scanner	A Java class used for reading keyboard or file input during program execution.	
Switch case	A type of program control that allows different segments of code to execute when the input value matches a given condition.	
Do while	A post-test loop that executes an unknown number of times until a condition is met, but always executes the first time through the loop.	
for	A pre-test loop that uses an iterator to keep track of how many times a loop will execute.	
continue	A keyword used to skip over the remaining code in a loop and return program control to the beginning of the loop to execute again.	
	and return program control to the beginning of the loop to	

while	A pre-test loop that executes an unknown number of times until a condition is met.	
break	A keyword used to terminate a loop from executing before the loop condition is met.	
array	A structure that stores multiple values of the same data type	
algorithm	A logical computational procedure that if correctly applied ensures the solution of a problem	
	An array of arrays, similar to a table, matrix, or spreadsheet.	
Nested loop	A for loop inside of a for loop	
Throws, try	A keyword in Java that signals the following block of code handles a specified exception.	
	This stops the interpreter from running the rest of the code until it finds a catch.	
	An error that indicates an issue with coding format.	
Runtime exception	An error that occurs while the program is running, also known as an exception.	
Logic error	An error that occurs as a result of incorrect programmer logic.	
Try catch	A block of code that handles exceptions by dealing with the exception if it is thrown.	
Runtime error	Errors that occur during run-time and can be corrected or handled by your code.	
Class	A template used for making Java objects.	
Object	An instance of a class.	
this	Reference An optional keyword used to access the members and methods of a class.	
new	The operator used to create an instance of a class.	
Garbage collector	A built-in function of the Java VM that frees memory as objects are no longer needed or referenced.	
setter	A method that changes the state of an object.	
getter	A method that returns information about an object back to	

	the calling program.	
	The calling program.	
	A procedure (changes the state of an object) or function (returns information about an object) that is encapsulated as part of a class.	
instantiating	A verb used to describe the act of creating a class object using the keyword new.	
	The process of assigning a default value to a variable.	
	An object reference that has not been instantiated.	
deconstructor	An optional method that is called just before an object is removed by the garbage collector.	
constructor	A special method used to create an instance of a class.	
public	A type of access modifier. Permits access from anywhere.	
	Used to assign initial values to instance variables of a class.	
private	A type of access modifier. Permits access only from inside the same class.	
static	Is a method that is available for use without first creating an instance of the class.	
	Any Java class-level variable that is declared with the static modifier. This means only one instance of the class variable can exist in the JVM regardless of the number of class instances.	
static	Is a keyword that makes a variable, method, or inner class available without first creating an instance of a variable.	
default	When there is no access modifier. Same access as public, except not visible to other packages.	

Задача 2. Посочете описанието на термина:

Термин	Описание
Наследяване	Предаване на свойства и методи от родителски на наследяващ клас
Суперклас	Родителски клас
Подклас	Наследяващ клас
Ключова дума final (в контекста на наследяването)	Клас неспособен да бъде наследяван
Ключова дума extends	Наследяване на родителски клас
Множествено наследяване	Един клас наследява няколко други
Пакет	Директория съдържаща няколко класа
Статично импортиране	
Предефиниране на методи	
Ключова дума super	Референция към родителския клас
Многослойно наследяване	Клас, който наследява клас, който наследява клас
Абстрактен клас	Клас, който не може да бъде инстанциран
Абстрактен метод	Метод, който не е дефиниран в контекста на класа
Анонимен клас	

Задача 3. Обяснете смисъла на твърденията:

- Частни членове (private) на суперкласът не се наследяват: Да
- Обектът на подклас се създава "на части": Да
- Между предефинирането и презареждането на методи съществува принципна разлика: Да
- Методите в Java имат едно важно свойство, което се проявява при наследяването, то се нарича виртуалност: Да
- На основата на абстрактен клас не може да бъдат създавани обекти (но може да бъде декларирана обектна променлива): Да