

Java programming - Tutorial no 01

Consider the following java program and answer to all the question bellow,

```
1      import java.util.Scanner;
2      public class Details{
3          public static void main(String[] args){
4              Name n=new Name();
5              n.setName();
6              Greeting g= new Greeting();
7              System.out.println(g.nameWithGreeting(n.getName()));
8          }
9      }
10     class Name{
11         String name;
12         Scanner sc = new Scanner(System.in);
13         public String getName(){
14             return name;
15         }
16         public void setName(){
17             System.out.print("Enter your name : "); Ushani
18             name=sc.nextLine();
19         }
20     }
21     class Greeting{
22         String greetMessage="Hello, nice daya to you";
23         public String nameWithGreeting(String name){
24             return greetMessage+" "+name;
25         }
26     }
```

- Q1. What is the output?
- Q2. How many **classes** have been used? Name them?
- Q3. How many class have been declared in this source file? Name them?
- Q4. How many classes have been used in this program that are in javaAPI? Name them and list the packages that they belong to?
- Q5. How many primitive variables have been used?Name them with the variable type?
- Q5. How many **reference variables** have been used? Name them with the variable type?
- Q6. Name the global variables separately have been used in the classes of the source file?
- Q7. Name the local variables separately have been used in the classes of the source file?
- Q8. How many methods have been used in the program? Name them?
- Q9. What methods of them are in java API? And What are the API classes they are at?
- Q10. How many methods have been declared in this source file? Name them?
- Q11. Name all the method that return a value when they call? And mention the return value types?
- Q12. Name all the methods that take values as parameters? And mention the value types?
- Q13. What are the packages use in the program? And list the classes that belong to each package?
- Q14. Using the line numbers show the execution order of the program?

Additional Questions on java language:

- Q15. All most all programs have some kinds of building blocks. What are the building blocks of a java source code file.
- Q16. What are the elements of a java class? And how java introduces those elements?
- Q17. What is the relationship between a class and it's object.
- Q18. What is a java source code file?
- Q19. What is a java program?
- Q20. List primitive data types and their capacity in bits and bytes?
- Q21. How java compiler treats local and global variables at compile time?
- Q22. short and char data types take same capacity. But what are the differences?
- Q23. Mention the default values of java global variables and how the default values are assigned to global variables?
- Q24. What are the access levels can be set to class members?
- Q25. What are the access modifiers that use to set access levels of class members?

By Senaka Somaratne (Sun certified java programmer)