Assignment-2

Date Assigned :02:01:2023

Completed Date:03:01:2023

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**1.create a java program to print your mother and father name, age, salary, phonenumber, address like city state country.**

**Ans:**

//mother and father name, age, salary, phonenumber, address like city state country

**import** java.util.Scanner;

**import** java.lang.Long;

**public** **class** Sample1 {

**public** **static** **void** main(String[] args) {

**int** salary=80000;

String phone="9876543210";

**long** phoneNumber=Long.*parseLong*(phone);

String address="67,Ranganathan Street,Asv city,TamilNadu";

Scanner name=**new** Scanner(System.***in***);

System.***out***.println("Enter your mother name: ");

String father=name.nextLine();

//mother =next().Scanner

Scanner f\_name =**new** Scanner(System.***in***);

System.***out***.println("Enter your father name: ");

String mother=f\_name.nextLine();

System.***out***.println("Father name: "+father+"\n"+"Mother name:"+mother);

System.***out***.println("Salary of my Parents: "+salary);

System.***out***.println("Father Phone-Number: "+ phoneNumber);

System.***out***.println("Address: "+address);

}

}

**Output:**

Enter your father name:

Aasai.D

Enter your mother name:

Usha.N

Father name: Aasai.D

Mother name:Usha.N

Salary of my Parents: 80000

Father Phone-Number: 9876543210

Address: 67,Ranganathan Street,Asv city,TamilNadu

**2.Write a java program to print the below msg in the given format**

**hello**

**welcome to**

**edubridge online classes**

**Ans:**

**public** **class** Align\_Sample {

**public** **static** **void** main(String[] args) {

System.***out***.println("hello\n welcome to\n edubridge online classes");

}

}

hello

welcome to

edubridge online classes

**3.What is default package in java**

**Ans:**

Import java.lang package internally by default

In java there are two packages java.lang package and a no-name package(also called as default package) are imported by default in all the classes in java

**4.Scanner class is in which package?**

**Ans:** java.util package

ex: import java.util.Scanner//import the scanner class

**5.list the methods of Scanner class.**

**Ans:**

* nextFloat()------return float valu
* nextInt()---------return int value
* next()-------return strings
* next().charAt(0)----return character
* nextLine()-----read string value from the user
* nextDouble()----reads a double value
* nextShort()-----reads a short value form the user

**6.list the types of datatypes with size and give an example of each by doing declaring and initializating the variables.**

**Ans:**

**Datatype size includes**

byte 1 byte -128 to 127

short 2 bytes -32768 to 32767

int 4 bytes -2147483648 to 2147483647

long 8 bytes -9223372036854775808 to9223372036854775807

float 4 bytes 6 to 7 digit decimals

double 8 bytes 15 decimal digits

Boolean 1 bit true or false

Char 2 bytes single character as ASCILL

**Program: initializing the variables**

**public** **class** Variable\_Initiating {

**public** **static** **void** main(String[] args) {

**long** salary=50000;

**float** number=3.55f;

**char** letter='K';

**boolean** bool=**true**;

String text="Kaviya";

**long** l=902490343;

**double** dou=423993;

**short** mark=99;

**int** experience=5;

System.***out***.println("long data type: "+salary);

System.***out***.println("float data type: "+number);

System.***out***.println("char data type: "+letter);

System.***out***.println("boolean data type: "+bool);

System.***out***.println("String data type: "+text);

System.***out***.println("long data type: "+l);

System.***out***.println("double data type: "+dou);

System.***out***.println("short data type: "+mark);

System.***out***.println("int data type: "+experience);

}

}

**Output:**

long data type: 50000

float data type: 3.55

char data type: K

boolean data type: true

String data type: Kaviya

long data type: 902490343

double data type: 423993.0

short data type: 99

int data type: 5

**7.Write a program to display the names of your 5 friends.**

**Ans:import** java.util.Scanner;

**public** **class** Name\_Friends {

**public** **static** **void** main(String[] args) {

Scanner input=**new** Scanner(System.***in***);//creating object of the scanner class

System.***out***.println("Enter number:");

String[] counts=**new** String[input.nextInt()];

System.***out***.println("Enter the name of the friends..!");

input.nextLine();

**for**(**int** start=0;start<counts.length;start++) {

counts[start]=input.nextLine();

}

System.***out***.println("Your friends List: ");

**for**(String str:counts) {

System.***out***.println(str);

}

}

}

**Output:**

Enter how many number of friends you have:

5

Enter the name of the friends..!

geetha

pushpa

maran

ramu

oviya

Your friends List:

geetha

pushpa

maran

ramu

oviya

**8.Write a program to do addition 5 number**

**Ans:**

**import** java.util.Scanner;

**public** **class** Addition\_5\_Number {

**public** **static** **void** main(String[] args)

{

**int** length=5;

**int** start,add=0,result=0;

{

System.***out***.println("input of 5 numbers one by one: ");

}

**for**(start=0;start<length;start++) {

Scanner input=**new** Scanner(System.***in***);

add=input.nextInt();

result+=add;

}

System.***out***.println("Sum of five numbers is: "+result);

}

}

**Output:**

enter 5 numbers one by one:

1

2

3

4

5

Sum of five numbers is: 15

**9.Write a program to display your father and mother name.**

**Ans:**

**import** java.util.Scanner;

**public** **class** Sample1 {

**public** **static** **void** main(String[] args) {

Scanner name=**new** Scanner(System.***in***);

System.***out***.println("Enter your father name: ");

String father=name.nextLine();

//mother =next().Scanner

Scanner f\_name =**new** Scanner(System.***in***);

System.***out***.println("Enter your mother name: ");

String mother=f\_name.nextLine();

System.***out***.println("Father name: "+father+"\n"+"Mother name:"+mother);

**Output:**

Enter your father name:

Aasai.D

Enter your mother name:

Usha.N

Father name: Aasai.D

Mother name:Usha.N

**10.write a program to display your name in short like yourname.fathernamefirstletter.sirnamefirstletter**

**Ans:**

**public** **class** First\_word\_First\_LastName {

**public** **static** **void** main(String[] args) {

String father="Kaviya Aasaithambi";

String[] nameSeperate=father.split(" ");

String initiate=nameSeperate[0]+"."+nameSeperate[1].charAt(0)+" Daughter of "+nameSeperate[1];

System.***out***.println("Name: " +initiate);

}

}

**Output:**

Name: Kaviya.A Daughter of Aasaithambi

**11.Explain the public static void main(String[] args) in detail.**

* public---->access modifier/entire program /to call by jvm for run anywhere
* static----->direct access wtihout object /we can accessing main method directly by using the static
* void--->return to jvm only so i don't want to return anything for jvm
* main---->name of the function/iside jvm
* String[],args-------->command line arguments

**12.Write a program to display names of days by using commandLine arguments.**

**Ans:**

import java.util.\*;

import java.time.LocalDate;

import java.util.Date;

import java.text.Format;

import java.text.SimpleDateFormat;

public class DateDisplay {

public static void main(String[] args) {

Calendar cal=Calendar.getInstance();

//LocalDate date =LocalDate.now();

SimpleDateFormat formatter=new SimpleDateFormat("dd/MM/yy");

System.out.println("Today date is: "+formatter.format(cal.getTime()));

Format f =new SimpleDateFormat ("EEEE");

String date= f.format(new Date());

System.out.println("Date: "+date);

}

}

**Output**

C:\Users\Kaviya\Desktop\Java\_program>java DateDisplay

Todays date is: 03/01/23

Date: Tuesday

**13.What are the rules of naming the java file.**

Ans:

File name upto 255 characters long and can contain letters, numbers, underscores

Operating system is case-sensitive,which means it distinguish between uppercase and lowercase letters in file names.

**14.what are the rules of naming the class**

Ans:

Class name should be nouns,in mixed case with the first letter of each internal word capitalize.class name should be simple and descriptive

Sample() , DemoClass(), Manager\_Member(),

**15.what are the rules for naming the methods**

Ans:

Methods should be verbs,in mixed case with the first letter lowercase and each internal word of first letter as capitalized.Except for variables,all instances,class,class constants are in mixed case with a lowercase first letter.Internal words start with capital letters

Example: run(),runFast(),getDetails(),printSalary()

Local variables,instance variables and class variables are also written in lowerCamelCase

**16.what are the rules for naming variables in java**

**Ans:**

* A variable name consists of lower,upper case ,0-9 digits, two special characters as underscore(\_) and dollar symbol($)
* First character must not be digit,blank spaces cannot be used as variable names,java keyword cannot be used as variable names
* Variable nams are case sensitive
* There is no length limit for variable name recommended(4---15)
* Variable names always should exist on the left-hand side of assignment operator
* Avoid using one character variables such as x,y,z,k

Example: myVar, \_myvar, MYVAR ,$myvar, myVar\_

**17.which is the main entry point of java program**

Ans: ----->public static void main(String[],args)

* public keyword

Access modifier/we use public keyword before the main method,then JVM can identify the execution point of the program.If we use private,protected,default before the main() method,it will not visible to JVM

* static keyword

we can make a method static by using the keyword as static,we should call the main method without creating the object.Static method invokes without creating objects.so we do not need any object to call the main()method

* void -----return type

In java every method has the return type that void return nothing to JVM

* main()

JVM execute the program line by line and end the execution after completion of this method.we can also overload the main()method

* String args[]

Accept some data from the user.It accept a group of strings which is called a string array. It is used to hold the command line arguments in form of string values

**18.who is invoking the main method of java**

Ans:

Jvm----static block---static methods—create object needed---finally execute the instance methods---jvm executes a static block on the highest priority basis,it means jvm first goes to static block even before it looks for the main() method in the program.

The main() method is the starting point of JVM to start the execution of a java program.Without main() method ,JVM will not execute the program.

**9.why main** **has to be static method..?**

**Ans:** when we use static keyword--whenever jdk saw the static then jdk understands asstatic is one of the method in main it means this don't need object.it is class member/class behaviourstatic members associated with class.it is common to all the objectswithout object/or before the creation of an object of the class,we can run the program bcoz of static keyword

JVM--🡪invoke it without instantiating the class

It also saves unnecessary wastage of memory which would have used by the object declared only for calling the main()method by the JVM.