**Assignment**

**Date: 24/03/2022**

**Submission Date:**

**1. Assign decimal, octal, hexadecimal values to variables and print.**

class Test

{

public static void main(String[] arg)

{

int d= 20;

int o=020;

int h=0x20;

int b=0b0101010101;

System.out.println("d="+d+"\to="+o+"\th="+h+"\tb="+b);

}

}

**2. Assign unicode value to char variable and print.**

class Test

{

public static void main(String[] arg)

{

char c = '\u0061';

System.out.println("c="+c);

}

}

**3. WAP to access/invoke Static variable and static method.**

class Check

{

static int x=50;

static int y=60;

}

class Test

{

static int x=10;

static int y=20;

public static void main(String args[])

{

System.out.println("x in main = "+x);

System.out.println("y in main = "+y);

System.out.println("x in Check = "+Check.x);

System.out.println("y in Check = "+Check.y);

System.out.println("x in main = "+Test.x);

System.out.println("y in main = "+Test.y);

}

}

**4. WAP to declare static variables of all primitive data types and print their default value.**

class Test

{

static byte b;

static short s;

static int i;

static long l;

static boolean bl;

static float f;

static double d;

static char c;

static String st;

public static void main(String args[])

{

System.out.println("byte = "+b);

System.out.println("short = "+s);

System.out.println("int = "+i);

System.out.println("long = "+l);

System.out.println("boolean = "+bl);

System.out.println("float = "+f);

System.out.println("double = "+d);

System.out.println("char = "+c);

System.out.println("string = "+st);

}

}

**5. WAP to print tables of 1-30 using 2 for loops**

(Multiplication Table 4)

import java.util.\*;

class Test

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

for(int i=1; i<=10; i++)

{

for (int j=1;j<=12; j++)

System.out.printf("%-2d\*%-2d=%-5d", j, i,(i\*j));

System.out.println();

}

}

}

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(Multiplication Table 3)

import java.util.\*;

class Test

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.print("Enter any number less than 20: ");

int x=sc.nextInt();

for(int i=1; i<=10; i++)

{

for (int j=1;j<=x; j++)

System.out.printf("%-2d\*%-2d=%-5d", j, i,(i\*j));

System.out.println();

}

}

}

**6 WAP to print tables of 1-30 using single for loop.**

(Multiplication Table 5)

import java.util.\*;

class Test

{

public static void main(String[] arg)

{

Scanner sc=new Scanner(System.in);

int j=0;

for (int i = 0; i < 12 \* 10; ++i)

{

int a = i / 10 + 1;

int b = i % 10 + 1;

System.out.printf("%-2d\*%-2d=%-5d", b, a, a \* b);

if(b==12)

System.out.println();

}

}

}

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import java.util.\*;

class Test

{

public static void main(String[] arg)

{

Scanner sc=new Scanner(System.in);

int j=0;

for(int i=1; i<=10; i++)

{

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.printf("%-2d\*%-2d=%-5d", i, j,(i\*j++));

System.out.println();

j=0;

}

}

}

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import java.util.\*;

class Test

{

public static void main(String[] arg)

{

Scanner sc=new Scanner(System.in);

for(int i=1; i<=10; i++){

int j=1;

while(j<=12)

System.out.printf("%-2d\*%-2d=%-5d", j, i,(i\*j++));

System.out.println();

}

}

}

----------------------------------------------------------------------------------------------------------------------------

import java.util.\*;

class Test

{

static void mul(int x){

for(int j=1; j<=12; j++)

System.out.printf("%-2d\*%-2d=%-5d",x,j,(x\*j));

}

public static void main(String[] arg)

{

Scanner sc=new Scanner(System.in);

for(int i=1; i<=10; i++){

mul(i);

System.out.println();

}

}

}

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import java.util.\*;

class Test

{

static void mul(int x){

int j=1;

while (j<=12)

System.out.printf("%-2d\*%-2d=%-5d",x,j,(x\*j++));

}

public static void main(String[] arg)

{

Scanner sc=new Scanner(System.in);

for(int i=1; i<=10; i++){

mul(i);

System.out.println();

}

}

}

**6. WAP to print tables of 1-30 using a while loop.**

(Multiplication Table 6)

import java.util.\*;

class Test

{

public static void main(String[] arg)

{

Scanner sc=new Scanner(System.in);

int i=1, j=1;

while (i<=10)

{

j=1;

while(j<=12)

System.out.printf("%-2d\*%-2d=%-5d",j,i,(i\*j++));

System.out.println();

i++;

}

}

}

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**7. Try to answer PPT questions covered in online class.**

**8. WAP to print \* patterns using for loop and while loop. (Right angle,triangle, Equilateral triangle, K pattern, X pattern**