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ICM 106 OR23106564

PROGRAMMING FUNDAMENTALS WEEK – 07 ASSIGNMENT

**Question 01**

**i)**

import java.util.\*;

class Example {

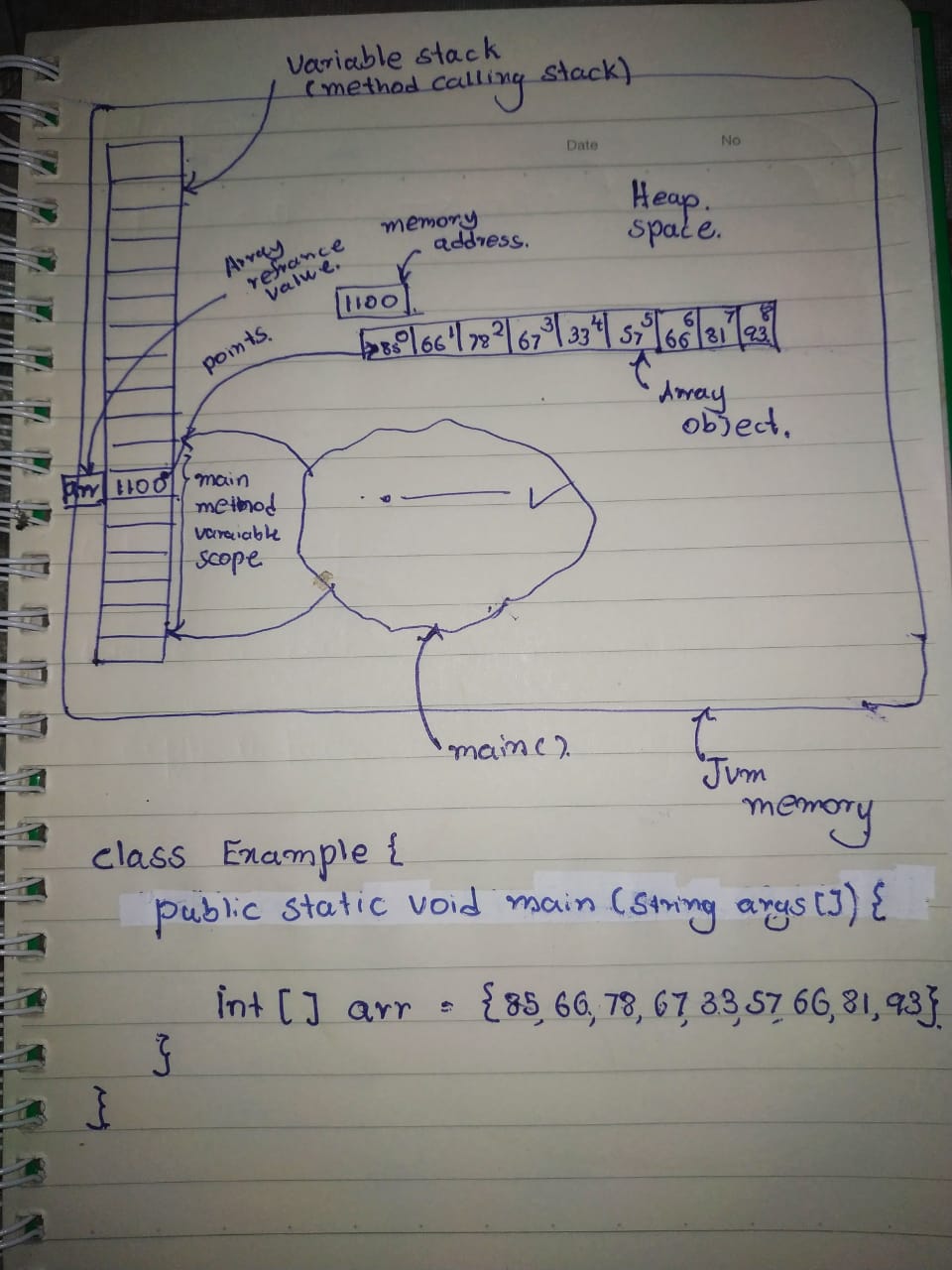
public static void main(String args[]) {

int[] arr = {12,35,47,59,62,73,81,93,111,121}

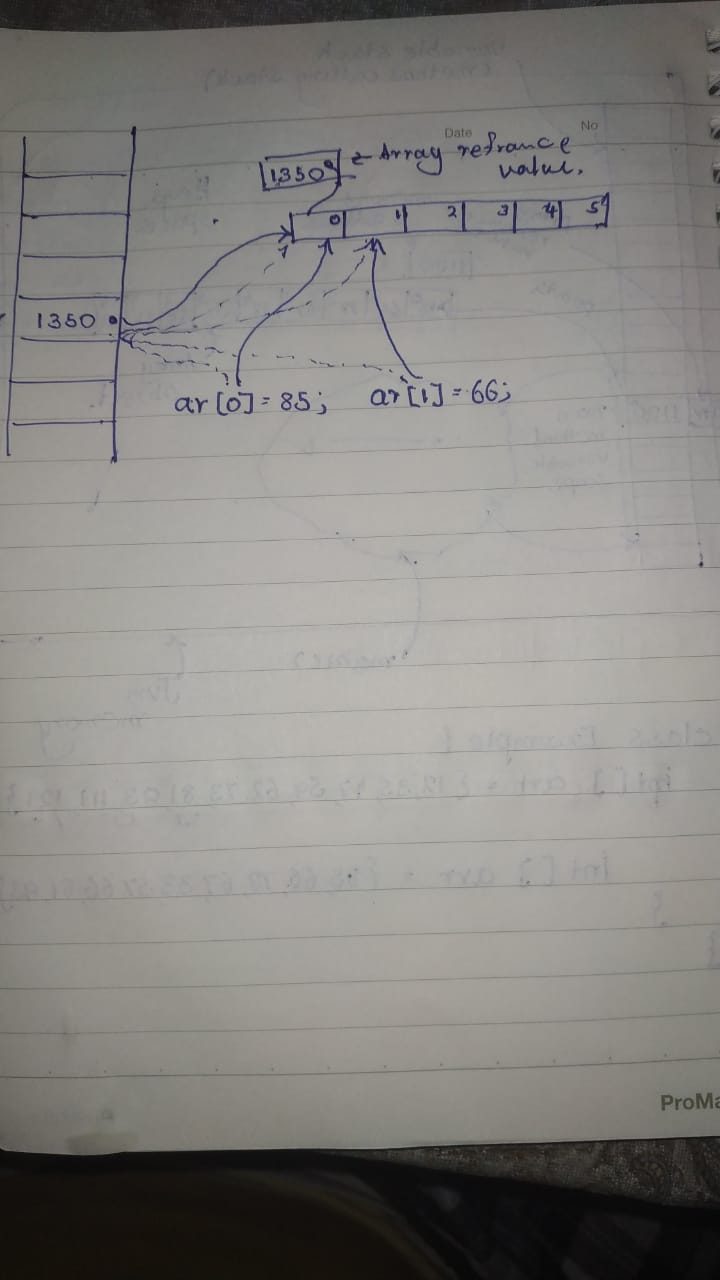
}

}

**ii)**



**iii)**



**iv)**

import java.util.\*;

class Example {

public static void main(String args[]) {

int[] arr = {12,35,47,59,62,73,81,93,111,121};

System.out.println(arr[0]);

System.out.println(arr[3]);

System.out.println(arr[5]);

}

}

Prints

12

59

63

**Question 02**

import java.util.\*;

class Example {

public static void main(String args[]) {

//Create Array and input given Data

double[] avgMarks = {85.66,78.00,67.33,57.66,81,91,53.66,61.66,74.33,79.33};

for (int i = 0; i < avgMarks.length; i++){

if (i==2 || i==6){

System.out.println((i+1)+(i==2?"rd ":"th ")+"Student Avarage :"+avgMarks[i]);

}

}

}

}

**Question 03**

import java.util.\*;

class Example {

public static void main(String args[]) {

//Enter Data using single Statement

long[] reserves = {2362,2311,1917,1912,1887,1854,1717,1717,1779,1705,1806,1896};

//Print array using foreach method

for(long a : reserves){

System.out.println(a\*1000000);

//Correct Incorrect Data

reserves[3] = 1812;

reserves[6] = 1817;

}

//Print Corrected Data

System.out.println();

for (int i = 0; i < reserves.length; i++){

if(i==3 ||i==6){

System.out.println((i==3?"April":"July")+" - "+reserves[i]);

}

}

}

}

**Question 04**

import java.util.\*;

class Example {

public static void main(String args[]) {

//Institute Of Computer Engineering Technology

//Enter Data using single Statement

char[] word = {73,110,115,116,105,116,117,116,101,32,79,102,32,67,111,109,112,117,116,101,114,32,69,110,103,105,110,101,101,114,105,110,103,32,84,101,99,104,110,111,108,111,103,121};

//Print array using foreach method

for(char a : word){

System.out.print(a==32?"\n":a);

}

}

}

**Question 05**

import java.util.\*;

class Example {

public static void main(String args[]) {

//i Marks array

int[] marks ={56,81,43,69,93,54,48,47,51,79,82,96,57,61,66};

//ii How many marks are input into the array

System.out.println(marks.length);

System.out.println();

//iii Marks array Print

for(int i=0; i<5; i++){

System.out.println(marks[i]);

}

//output :- print index 1 to 5 variables in array

//56

//81

//43

//69

//93

//iv print all marks of an array using for loop

for(int i=0; i<marks.length; i++){

System.out.println(marks[i]);

}

System.out.println();

//v print the 10th element to the last element

for(int i=9; i<marks.length; i++){

System.out.println(marks[i]);

}

}

}

**Question 06**

import java.util.\*;

class Example {

public static void main(String args[]) {

//i days array

String[] days ={"Sunday","Monday","Tuesday","Wednesday","Thursday","Friday"};

//ii Print Days Array

System.out.println(Arrays.toString(days));

System.out.println();

//iii Print Reverse

System.out.print("[");

for (int i = days.length-1; i >=0; i--){

System.out.print(days[i]+", ");

}

System.out.print("\b\b]");

}

}

**Question 07**

import java.util.\*;

class Example {

public static void main(String args[]) {

//i Array to store Block letters

char[] letters ={65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90};

//ii Print that array as follows[ A, B, C, D, …………….]

System.out.print("[");

for (int i = 0; i < letters.length; i++){

System.out.print(letters[i]+", ");

}

System.out.print("\b\b]");

System.out.println();

//iii Print the block letters in the even index of an array.

System.out.print("[");

for (int i = 0; i < letters.length; i+=2){

System.out.print(letters[i]+", ");

}

System.out.print("\b\b]");

System.out.println();

//iv Print the block letters in the odd index of an array.

System.out.print("[");

for (int i = 1; i < letters.length; i+=2){

System.out.print(letters[i]+", ");

}

System.out.print("\b\b]");

System.out.println();

//v Print the array in reverse order..

System.out.print("[");

for (int i = letters.length-1; i >=0; i--){

System.out.print(letters[i]+", ");

}

System.out.print("\b\b]");

}

}

**Question 08**

import java.util.\*;

class Example {

public static void main(String args[]) {

//i Array to store the annual rainfall values

int[] rainFall ={2376,1945,2060,1781,2365,1005,1162,1016,1512,2231,1903,12061,1005,1545,2156,2037,1583,3668};

//ii Print the number of districts

System.out.println("Number of Districts are : "+rainFall.length);

System.out.println();

//iii Count and print the number of districts with more than 2000mm

int count = 0;

for (int i = 0; i < rainFall.length; i++){

if(rainFall[i]>2000){

count++;

}

}

System.out.println("Number of districts with more than 2000mm are : "+count);

System.out.println();

//iv Count and print the number of districts with less than 1000mm

int countLess = 0;

for (int i = 0; i < rainFall.length; i++){

if(rainFall[i]<1000){

countLess++;

}

}

System.out.println("Number of districts with less than 1000mm are : "+countLess);

System.out.println();

//v Find the average annual rainfall values of all districts.

int total= 0;

for (int i = 0; i < rainFall.length; i++){

total+=rainFall[i];

}

System.out.println("average annual rainfall values : "+(total/rainFall.length));

}

}

**Question 09**

A.array=new int[5];

B.array=new int[10];

C.array=new int[-5];

E.array=new int[]{10, 20, 30, 40, 50};

F.array=new int[]{};

**Question 10**

import java.util.\*;

class Example {

public static void main(String args[]) {

//I. Create an array to store results.

int[] diceResult = {6,3,3,2,4,1,6,6,2,4};

//II. Find the number of times ‘3’ and ‘6’ is rolled.

int count = 0;

for (int i = 0; i < diceResult.length; i++){

if(diceResult[i]==3 || diceResult[i]==6){

count++;

}

}

System.out.println(count);

System.out.println();

//III. Find the number of times odd numbers are rolled.

int countOdd = 0;

for (int i = 0; i < diceResult.length; i++){

if((diceResult[i]%2)!=0){

countOdd++;

}

}

System.out.println(countOdd);

System.out.println();

//IV. Search whether the number ‘5’ are rolled.

int countFive = 0;

for (int i = 0; i < diceResult.length; i++){

if(diceResult[i]==5){

countFive++;

}

}

System.out.println("number 5 " + ((countFive > 0 ? "rolled " + countFive +" times" : "did not roll")));

}

}

**Question 11**

Output will be 0,0,0;

Reason is when initiating the array without values, default value is 0.