Assignment 01 : WAP to find angles of a triangle if two angles are given

```
import java.util.Scanner;

public class AngleOfTriangle{
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
int ch;
double a1,a2,a3;

do{
System.out.print("Menu\n1.Get 3rd Angle of Triangle\n2.Exit\nEnter your choice : ");
ch = sc.nextInt();

switch(ch){
case 1:
System.out.print("Enter the value of angle1 : ");
a1 = sc.nextDouble();

System.out.print("Enter the value of angle2 : ");
a2 = sc.nextDouble();

a3 = (180-(a1+a2));
System.out.println("Value of angle3 = "+a3);
break;
```

```
case 2:
System.out.println("Exited the Program!");
break;
default:
System.out.println("Invalid Input Please Try Again!");
}
}
while(ch!=2);

sc.close();
}
}
```

Assignment 02 : WAP to convert days into years, weeks, and days.

```
import java.util.Scanner;


public class DaysToWeeksMonthsYears {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
int totalDays,years,remainingDays,weeks,months;
char ch;
do{
System.out.print("\n1.Perform Conversion of Days to Years/Months/Weeks \n2.Exit\nEnter your choice : ");
ch = sc.next().charAt(0);


switch(ch){
case '1':
System.out.print("Enter the number of days: ");
totalDays = sc.nextInt();
years = totalDays / 365;
remainingDays = totalDays % 365;
months = remainingDays / 30;
remainingDays = remainingDays % 30;
weeks = remainingDays / 7;
remainingDays = remainingDays % 7;
String s1 = " year, ";
String s2 = " month, ";
```

```
String s3 = " week, & ";
String s4 = " day. ";
if(years>1){
s1 = " years, ";
}
if(months>1){
s2 = " months, ";
}
if(weeks>1){
s3 = " weeks, & ";
}
if(remainingDays>1){
s4 = " days. ";
}
System.out.println(totalDays+" days is equivalent of
"+years+s1+months+s2+weeks+s3+remainingDays+s4);
break;
case '2':
System.out.println("Exited the program successfully!");
break;
default :
System.out.println("Invalid Input! Please Try again!");
}
}
while(ch!='2');
sc.close();
```

```
}

}
```

Assignment 03 : WAP to enter the month number between(1-12) and print the number of days in the month switch case.

```
import java.util.Scanner;

public class NumberOfDaysInMonth {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
int ch;

do{
System.out.print("\n1.Get number of Days in a month \n2.Exit\nEnter your choice : ");
ch = sc.nextInt();
sc.nextLine();

switch(ch){
case 1:
int month;
System.out.print("Enter the month number 1-12 : ");
month = sc.nextInt();
sc.nextLine();
switch(month){
case 1,3,5,7,8,10,12:
System.out.println("There are 31 days in "+month+"th month.");
break;
case 4,6,9,11:
```

```
System.out.println("There are 30 days in "+month+"th month.");
break;
case 2:
System.out.print("Is it leap year?(yes/no)");
String s = sc.nextLine();
if(s.equals("yes")){
System.out.println("There are 29 days in "+month+"th month.");
}
else{
System.out.println("There are 28 days in "+month+"th month.");
}
break;
default:
System.out.println("Invalid month Input!");
break;
}
break;
case 2:
System.out.println("Exited the program successfully!");
break;
default:
System.out.println("Invalid Input! Please Try Again!");
}
}
while(ch!=2);
sc.close();
```

```
}

}
```

Assignment 04 : WAP to find the second largest element in the array.

```
import java.util.Scanner;


public class SecondLargestOfArray {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
int ch;
int arr [];


do{
System.out.print("\n1.Find Second largest number in an array!\n2.Exit\nEnter your choice :
");
ch = sc.nextInt();
sc.nextLine();
switch(ch){
case 1:
System.out.print("Enter number of elements in array: ");
int n = sc.nextInt();
sc.nextLine();
arr = new int[n];
System.out.println("Enter "+n+" elements!");
for(int i=0; i<n; i++){
arr[i] = sc.nextInt();
}
System.out.println("The array is!");
```

```
for(int x : arr){
System.out.print(x + " ");
}
System.out.println();
int smx = -99999;
int mx = arr[0];
for(int i=0; i<n; i++){
if(mx<arr[i]){
smx = mx;
mx = arr[i];
}
else if(smx<arr[i] && arr[i]!=mx){
smx = arr[i];
}
}
System.out.println("Second Largest element in the array is "+ smx);
break;
case 2:
System.out.println("Exited the program successfully!");
break;
default:
System.out.println("Invalid Input! Please Try Again!");
}
}
while(ch!=2);
sc.close();
```

```
}

}
```

Assignment 05 : WAP to delete the element at a particular position in the array

```
import java.util.Scanner;

public class DeleteAnElementAtPosition {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter number of elements in array: ");
int n = sc.nextInt();
sc.nextLine();
int arr[];
arr = new int[n];

System.out.println("Enter "+n+" elements!");
for(int i=0; i<n; i++){
arr[i] = sc.nextInt();
}
System.out.println("The array is!");
for(int x : arr){
System.out.print(x + " ");
}
System.out.println();

System.out.print("Enter the position of element you want to delete : ");
int pos = sc.nextInt();
```

```
if(pos<n && pos>=0){
for(int i=pos; i<n-1; i++){
arr[i] = arr[i+1];
}
n--;
System.out.println("Update array is!");
for(int i=0; i<n; i++){
System.out.print(arr[i]+" ");
}
}
else{
System.out.println("Invalid index value!");
}
sc.close();
}
}
```

Assignment 06 : WAP to insert an element in an array at the specified position.

```
import java.util.Scanner;

public class InsetAnElemAtPosition {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter number of elements in array: ");
int n = sc.nextInt();
sc.nextLine();
int arr[];
arr = new int[n];

System.out.println("Enter "+n+" elements!");
for(int i=0; i<n; i++){
arr[i] = sc.nextInt();
}
System.out.println("The array is!");
for(int x : arr){
System.out.print(x + " ");
}
System.out.println();

System.out.print("Enter the position of element you want to Insert new element : ");
int pos = sc.nextInt();
```

```
if(pos>=0 && pos<n){
System.out.print("Enter the new element : ");
int elem = sc.nextInt();
arr[pos] = elem;
System.out.println("Update array!");
for(int x:arr){
System.out.print(x+" ");
}
}
else{
System.out.println("Invalid Index!");
}
sc.close();
}
}
```

Assignment 07 : WAP to print square star pattern

```
import java.util.Scanner;


public class SquarePattern {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print("Enter the side of square : ");
int s = sc.nextInt();
int i = 0;
int j = 0;

for(i=0; i<s; i++){
System.out.print("\t\t\t");
for(j=0; j<s; j++){
System.out.print("*");
}
System.out.println();
}
}
}
```