**6.) Create a class Utility with three static methods add () the first add () will take 2 arguments, add them, and return the result, second add () will take 3 arguments, add them, and return the result,third add () will accept an array of integers, add elements in the array and return the result.**

**Invoke the all the three overloaded methods from main () within the same class**

**package** p1;

**import** java.util.Scanner;

**public** **class** Utility {

**static** **int** *a*;

**static** **int** *b*;

**static** **int** *c*;

**static** **int** *d*;

**static** **int** *e*;

**static** **int** *arr*[]=**new** **int**[10];

**public** **static** **int** add()

{

**int** add=*a*+*b*;

**return** add;

}

**public** **static** **int** Add()

{

**int** add=*c*+*d*+*e*;

**return** add;

}

**public** **static** **int** AddArray()

{

**int** sum=0;

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

{

sum=sum+*arr*[i];

}

**return** sum;

}

**public** String toString()

{

String s=String.*format*("A=%d%n B=%d%n C=%d%n D=%d%n E=%d%n Addition of first method=%d%n Addition of second method= %d%n Addition of array=%d%n",*a*,*b*,*c*,*d*,*e*,*add*(),*Add*(),*AddArray*());

**return** s;

}

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

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

Utility u=**new** Utility();

System.***out***.println("Enter the value of a:");

*a*=s.nextInt();

System.***out***.println("Enter the value of b:");

*b*=s.nextInt();

System.***out***.println("Enter the value of c:");

*c*=s.nextInt();

System.***out***.println("Enter the value of d:");

*d*=s.nextInt();

System.***out***.println("Enter the value of e:");

*e*=s.nextInt();

System.***out***.println("Enter the size of array=");

**int** n=s.nextInt();

System.***out***.println("Enter the"+n+" elements of array=");

**for**(**int** i=0;i<n;i++)

{

*arr*[i]=s.nextInt();

}

System.***out***.println("-------------------------------------------");

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

System.***out***.println("--------------------------------------------");

}

}

Output:

Graphical user interface, text, application

Description automatically generated