DAA LAB TASK 5

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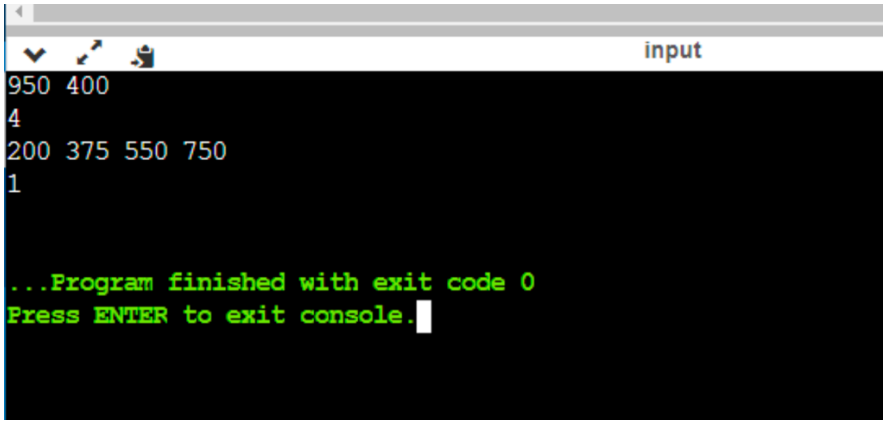
CAR FUELLING

```
import java.util.*;
import java.io.*;
public class Main {
static int compute_refills(int dist,int tank,int stops[],int n){
int current_refills=0;
int num_refills=0;
int last_refill=0;
while(current_refills<=n) {
last_refill = current_refills;
while ((current_refills <= n) && (stops[current_refills + 1] -
stops[last_refill])
<= tank) {
current_refills = current_refills + 1;
}
if (current_refills == last_refill)
return -1;
if (current_refills <= n)
num_refills = num_refills + 1;
}
return num_refills;
}
public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
int dist = scanner.nextInt();
int tank = scanner.nextInt();
int n = scanner.nextInt();
int stops[] = new int[n*n*n];// to solve array index out of bound
exception
```

```
//increase the size of the array for (int i = 0; i < n; i++) {
stops[i] = scanner.nextInt(); }
System.out.println(compute_refills(dist,tank,stops,n)); }

}
```

OUTPUT:



PACKAGE FUELLING:

```
import java.util.Scanner;
public class Main {
static int carrefuling(int distance,int tank,int stops[],int n) { int
currentrefills=0;
int numrefills=0;
int lastrefills=0;
while(currentrefills<=n-1) {
lastrefills=currentrefills;

while((currentrefills<=n-1) && stops[currentrefills+1]-
stops[lastrefills]<=tank) { currentrefills=currentrefills+1;
}
if(currentrefills==lastrefills)
return -1;
if(currentrefills<=n)
```

```
numrefills=numrefills+1;
}
System.out.println("Possible");
return numrefills;
}
public static void main(String[] args) {
// TODO Auto-generated method stub
Scanner sc=new Scanner(System.in);
int distance=sc.nextInt();
int tank=sc.nextInt();
int n=sc.nextInt();
int stops[]=new int[n*n*n];
for(int i=0;i<n;i++) {
stops[i]=sc.nextInt();
} System.out.println(carrefuling(distance,tank,stops,n));
tank=distance-stops[3];
System.out.println("The extra distance is :-"+tank);
System.out.print("Coming back is ");
carrefuling(distance,tank,stops,n);
}
}
```

OUTPUT: