**SOURCE CODE:**

class Binary

{

public static void main(String args[])

{

int[] Data={5,10,15,20,30,35};

int lb=0;

int ub=4;

int item=40;

int loc=-1;

int beg=lb;

int end=ub;

int mid=(beg+end)/2;

while(beg<=end&&Data[mid]!=item)

{

if(item<Data[mid])

{

end=mid-1;

}

else

{

beg=mid+1;

}

mid=(beg+end)/2;

}

if(Data[mid]==item)

{

loc=mid;

System.out.println("Item is present in array on location: "+loc);

}

else

{

loc=-1;

System.out.println("Item is not present in array"+loc);

}

}

}

**OUTPUT:**

1. **When item is not present in array:**



1. **When item is present in array:**

