EXPONENTIAL SEARCH :

**package** exponentialsearch34;

**import** java.util.Arrays;

**public** **class** Exponentailexample {

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

**int**[] arr = {5,10,20,25,30};

**int** length= arr.length;

**int** value = 20;

**int** outcome = *exponentialSearch*(arr,length,value);

**if**(outcome<0){

System.***out***.println( "Element is not present in the array");

}**else** {

System.***out***.println( "Element is present in the array at index :"+outcome);

}

}

**public** **static** **int** exponentialSearch(**int**[] arr ,**int** length, **int** value ){

**if**(arr[0]==value){

**return** 0;

}

**int** i=1;

**while**(i<length && arr[i]<=value){

i=i\*2;

}

**return** Arrays.*binarySearch*(arr,i/2,Math.*min*(i,length),value);

}

}