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ROLL NO: S-56

SUBJECT: AOA

EXPERIMENT NO: 1

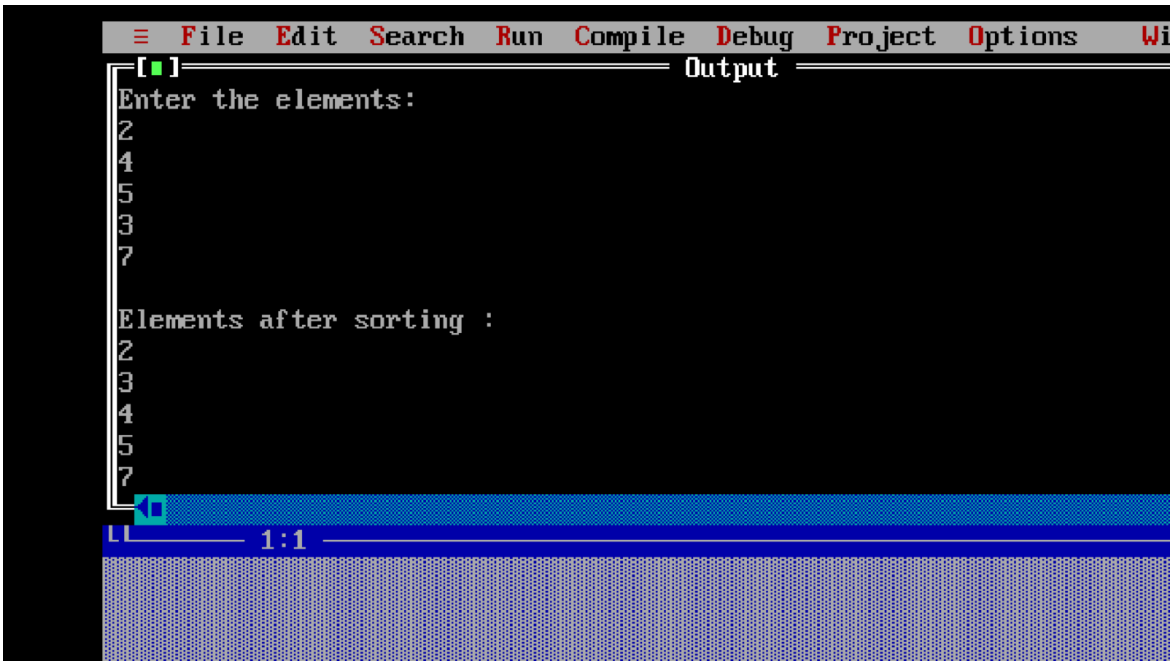
To implement insertion sort and comparative analysis for large values of 'n'

```
#include<stdio.h>
#include<conio.h>
int main(){
int i,j,key,n;
int A[100];
clrscr();
printf("***INSERTION SORT***");
printf("\nEnter the size of array :");
scanf("%d",&n);
printf("\nEnter the elements: \n");
for(i=0;i<n;i++){
scanf("%d",&A[i]);
}
```

```
for(j=1;j<=n;j++){
  key=A[j];
  i=j-1;
  while(i>0 && A[i]>key){
    A[i+1]=A[i];
    i=i-1;
    }
  A[i+1]=key;
  }
printf("\nElements after sorting :");
for(i=0;i<n;i++){
printf("\n%d",A[i]);
}


return 0;
}
```

OUTPUT:


File Edit Search Run Compile Debug Project Options Wi
Output
Enter the elements:
2
4
5
3
7
Elements after sorting :
2
3
4
5
7
1:1