**Patterns:**

**Butterfly:**

for(i to n){

for(j to i) *//stars*

*for(j to j<(2\*(n-i)) //spaces*

for(j to i) *//stars*

}

//lower part flip it.

**Solid Rhombus:**

for(i to n){  
for(j=n-i to j>=1) *//spaces*

for(k to n) *//stars*

}

**Daimond:**

for(i to n){

for(j= n-i to j>=1) *//spaces*

for(j=1 to j<=i) *//Stars*

for(j=2 to j<=i) *//stars*

}

//lower part flip it.

**Number Pyrimid:**

for(i to n){

for(j= n-i to j>=1) *//spaces*

for(j=1 to j<=i) *//Numbers*

sout(i+” “)

}

**Palindromic Numbers:**

for(i to n){

for(j= n-i to j>=1) *//spaces*

for(j=i to j>=1) *//Numbers*

sout(j+” “)

for(j=2 to j<=i) *//Numbers*

sout(j+” “)

}