

```

fa=facto(i)/(facto(j)*facto(i-j));
printf("%d ",fa);
}
printf("\n");
}
}

```

7.

```

A
ABA
ABCBA
ABCD CBA
#include<stdio.h>
void main(){
int i,j,n;
printf("Enter the number of lines:");
scanf("%d",&n);
for(i=1;i<=n;i++){
for(j=1;j<=n-i;j++){
printf(" ");
}
for(j=1;j<=i;j++){
printf("%c",(char)(j+64));
}
for(j=i-1;j>=1;j--){
printf("%c",(char)(j+64));
}
printf("\n");
}
}

```

8.

```

      *
     * *
    * * *
   * * * *
  * * * *
 * * *
* *
*

#include<stdio.h>
void main()
{
int i,j,n;
printf("Enter the number of * in the middle line:");
scanf("%d",&n);
for(i=1;i<=n;i++){
for(j=1;j<=n-i;j++){
printf(" ");
}
for(j=1;j<=i;j++){
printf("*");
}
printf("\n");
}
for(i=n-1;i>=1;i--) { //for downward pattern
for(j=1;j<=n-i;j++){
printf(" ");
}
for(j=1;j<=i;j++){
printf("*");
}
printf("\n");
}
}

```