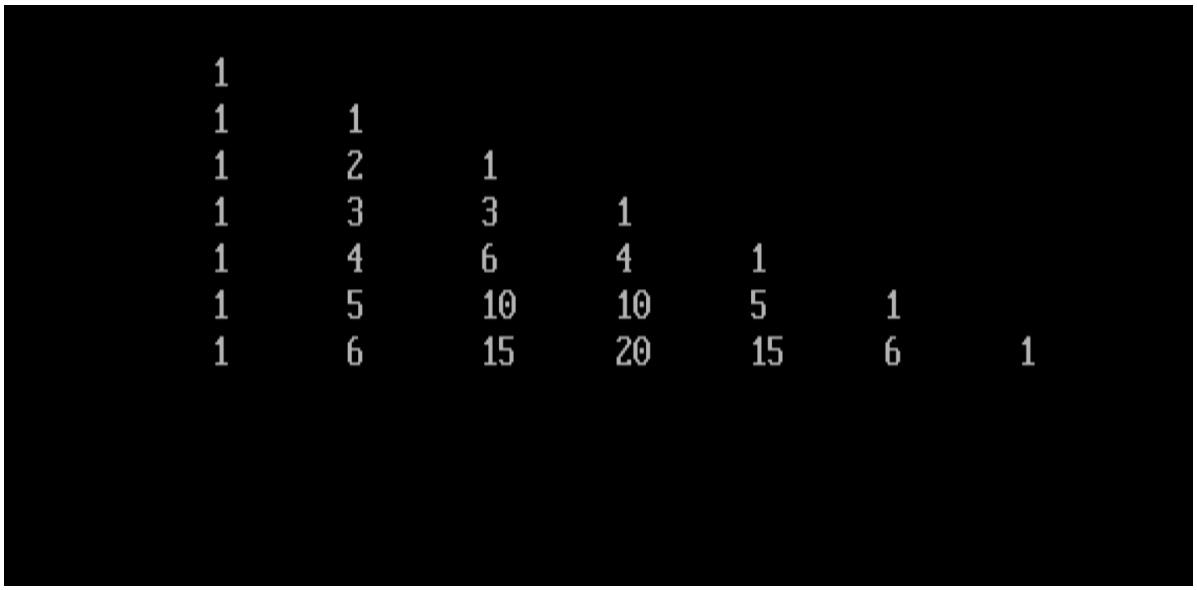
1. **C program to print Pascal's triangle**

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a[7][7]={0};
int r=2,c,i,j;
clrscr();
a[0][0]=a[1][0]=a[1][1]=1;
while(r<7)
{
a[r][0]=1;
for(c=1;c<=r;c++)
a[r][c]=a[r-1][c-1]+a[r-1][c];
r++;
}
for(i=0;i<7;i++)
{
printf("\n");
for(j=0;j<=i;j++)
printf("\t%d",a[i][j]);
}
getch();
}
```

OUTPUTS



2. **Develop a program to print the transpose of a matrix.**

```
#include<conio.h>
void main()
{
int i,j,r,c,a[10][10],b[10][10];
clrscr();
printf("\nEnter the number of rows and columns of a matrix: ");
scanf("%d,%d",&r,&c);
```

```
printf("Enter the elements of matrix\n");
for(i=0;i<r;i++)
for(j=0;j<c;j++)
scanf("%d",&a[i][j]);
for(i=0;i<r;i++)
for(j=0;j<c;j++)
b[j][i]=a[i][j];
printf("\nThe transpose of the matrix\n");
for(i=0;i<c;i++)
{
printf("\n");
for(j=0;j<r;j++)
printf("%d\t",b[i][j]);
}
getch();
}
```

OUTPUTS