```
2.Number pattern 2
1. Square Number Pattern 1
                                                                   3. Number pattern 3
#include<stdio.h>
                                  #include<stdio.h>
                                                                   #include<stdio.h>
int main()
                                  int main()
                                                                   int main()
 int i,j,n;
                                     int i,j,n;
                                                                     int i,j,n;
  printf("Input number of
                                     printf("Input number of
                                                                      printf("Input number of rows:
rows:");
                                  rows: ");
  scanf("%d",&n);
                                     scanf("%d",&n);
                                                                      scanf("%d",&n);
  for(i=1;i<=n;i++)
                                     for(i=1;i<=n;i++)
                                                                      for(i=1;i<=n;i++)
    for(j=1;j<=n;j++)
                                       if(i%2!=0)
                                                                        for(j=1;j<=n;j++)
       {printf("1");}
                                       for(j=1;j<=n;j++)
                                                                          if(j%2!=0)
       printf("\n");
                                         printf("1");
                                                                          printf("0");
                                         else
                                                                          else
 }
                                         for(j=1;j<=n;j++)
                                                                             printf("1");
}
                                                                          printf("\n");
                                            printf("0");
                                         printf("\n");
                                                                     }
                                    }
                                  5. Number Pattern 5:
                                                                   6. Number Pattern 6:
4. Number pattern 4:
                                  #include<stdio.h>
#include<stdio.h>
                                                                   #include<stdio.h>
                                  int main()
int main()
                                  {
                                                                   int main()
                                     int i,j,n;
                                     printf("Input number of
  int i,j,n;
                                                                      int i,j,n;
  printf("Input number of
                                  rows:");
                                                                      printf("Input number of rows :
                                     scanf("%d",&n);
rows: ");
                                                                   ");
  scanf("%d",&n);
                                     for(i=1;i<=n;i++)
                                                                     scanf("%d",&n);
  for(i=1;i<=n;i++)
                                                                      for(i=1;i<=n;i++)
                                       for(j=1;j<=n;j++)
     for(j=1;j<=n;j++)
                                                                        for(j=1;j<=n;j++)
                                       if(i==(n/2+1)\&\&
    if(i==1 | | i==n)
                                                                        if((i%2!=0) && (j%2!=0))
                                  j==(n/2+1)
      printf("1");
                                         printf("0");
                                                                          printf("1");
    else if((i>1&&i< n)&&j==1
                                       else
                                                                          else
                                         printf("1");}
                                                                   if((i\%2!=0)\&\&(j\%2==0))
|| (i>1&&i< n)&&j==n)
      printf("1");
                                       printf("\n");
                                                                             printf("0");
                                                                        else if((i%2==0)&&(j%2!=0))
    else
       printf("0");}
                                                                          printf("0");
    printf("\n");
                                                                          else
                                     }
                                     return 0;
                                                                   if((i\%2==0)\&\&(j\%2==0))
                                                                             printf("1");
  }
  return 0;
                                                                        printf("\n");
                                                                      return 0;}
```

```
7. Number Pattern 7:
                                   8. Number Pattern 8:
                                                                                else if((i>1 && i<n &&
                                                                       8...
                                                                       5i!=(n/2+1))&&(j==2 || j==n-
                                   #include<stdio.h>
#include<stdio.h>
                                   int main()
                                                                       1))
int main()
                                   {
                                                                              printf("1");
                                     int i,j,n;
                                                                              else
  int i,j,n;
                                      printf("Input number of
                                                                                printf("0");}
  printf("Input number of
                                   rows: ");
                                                                           printf("\n");
                                      scanf("%d",&n);
rows:");
  scanf("%d",&n);
                                     for(i=1; i<=n; i++)
                                                                         return 0; }
                                                                                           else if((i>1
  for(i=1; i<=n; i++)
                                                                       && i<n &&
                                        for(j=1; j<=n; j++)
                                                                       5i!=(n/2+1))&&(j==2 \mid | j==n-
    for(j=1; j<=n; j++)
                                                                       1))
                                          if((i==1 | | i==n)\&\& (j==1)
                                                                              printf("1");
       if(i!=(n/2+1) \&\&
                                   || j==n))
                                                                              else
j==(n/2+1)
                                             printf("1");
                                                                                printf("0");}
         printf("0");
                                          else if(i==(n/2+1) \&\&
                                                                           printf("\n");
       else if(i==(n/2+1))
                                   j==(n/2+1)
         printf("0");
                                             printf("1");
                                                                         return 0; }
       else
         printf("1");
    printf("\n");
  return 0;
9. Number Pattern 9:
                                   10. Number pattern 10:
                                                                       11.number Pattern 11:
#include<stdio.h>
int main()
                                   #include<stdio.h>
                                                                       #include<stdio.h>
                                   int main()
                                                                       int main()
{
  int i,j,n;
                                   {
  printf("Input number of
                                     int i,j,n;
                                                                         int i,j,n;
rows: ");
                                      printf("Input number of
                                                                         printf("Input number of
  scanf("%d",&n);
                                   rows: ");
                                                                       rows:");
                                     scanf("%d",&n);
                                                                         scanf("%d",&n);
  for(i=1; i<=n; i++)
                                     for(i=1; i<=n; i++)
                                                                         for(i=1; i<=n; i++)
    for(j=1; j<=n; j++)
                                        for(j=1; j<=n; j++)
                                                                           for(j=1; j<=n; j++)
       if((i==1 | | i==n) \&\& (j>1)
                                          printf("%d",i);
&& j<n))
                                                                              printf("%d",j);
         printf("1");
       else
                                        printf("\n");
                                                                           printf("\n");
if((i>1&&i< n)&&(j==1||j==n))
         printf("1");
                                     return 0;
                                                                         return 0;
       else
         printf("0");
    printf("\n");
  return 0;
```

```
12. Number Pattern 12:
                                                                     14.
                                        13. Number pattern 13:
                                                                    #include<stdio.h>
#include<stdio.h>
                                        #include<stdio.h>
                                                                    int main()
int main()
                                        int main()
                                                                    {
                                                                      int i,j,n;
  int i,j,n,k=1;
                                          int i,j,n,k=1;
                                                                      printf("Input number of rows :
  printf("Input number of rows : ");
                                          printf("Input number
  scanf("%d",&n);
                                        of rows: ");
                                                                      scanf("%d",&n);
                                          scanf("%d",&n);
  for(i=1;i<=n;i++)
                                                                      for(i=1;i<=n;i++)
                                          for(i=1;i<=n;i++)
    for(j=k;j< k+n;j++)
                                                                         for(j=n;j>n-i;j--)
                                            for(j=k;j< k+n;j++)
       printf("%-4d",j);
                                                                           printf("%d",j);
                                               printf("%-4d",j);
                                                                         for(j=1;j<=n-i;j++)
    k++;
    printf("\n");
                                            k=k+n;
                                                                           printf("%d",n-i+1);
  }
                                            printf("\n");
  return 0;
                                                                         printf("\n");
                                          return 0;
                                                                      return 0;
15.
                                        16.
                                                                    17.
#include<stdio.h>
                                        #include<stdio.h>
                                                                    #include<stdio.h>
int main()
                                        int main()
                                                                    int main()
  int i,j,n;
                                          int i,j,n;
                                                                      int i,j,n;
  printf("Input number of rows : ");
                                          printf("Input number
                                                                      printf("Input number of rows :
  scanf("%d",&n);
                                        of rows: ");
  for(i=1;i<=n;i++)
                                          scanf("%d",&n);
                                                                      scanf("%d",&n);
                                          for(i=1;i<=n;i++)
                                                                      for(i=1;i<=n;i++)
    for(j=i;j<=n;j++)
                                          {
                                            for(j=i;j<=n;j++)
                                                                         for(j=i;j>=1;j--)
       printf("%d",j);
                                                                         {
                                               printf("%d",j);
                                                                           printf("%d",j);
    for(j=i;j>1;j--)
                                            for(j=i-1;j>=1;j--)
                                                                        for(j=2;j<=n-i+1;j++)
       printf("%d",n);
                                               printf("%d",j);
                                                                           printf("%d",j);
    printf("\n");
                                            printf("\n");
                                                                         printf("\n");
  return 0;
                                          }
                                          return 0;
                                                                      return 0;
```