Q. Write a program to print:

1

121

12321

1234321

123454321

Method: 1 (Using the square of 11)

```c
#include<stdio.h>

int main(){
   int a = 1;
   for (int i = 0; i < 5; i++){
      printf("%d\n", a * a);
      a = a * 10 + 1;
   }


   return 0;
}
```

Method: 2 (Using nested for loop)

```c
#include<stdio.h>

int main(){
   for (int i = 1; i <= 5; i++){
      for (int j = 1; j <= i; j++){
         printf("%d", j);
      }
for (int k = i - 1; k >= 1; k--){
```

```c
        printf("%d", k);
    }
    printf("\n");
}
return 0;
}
```

Method: 3 (Using While loop)

```c
#include<stdio.h>

int main(){
    int i = 1;
    while (i <= 5){
        int j = 1;
        while (j <= i){
            printf("%d", j);
            j++;
        }

        int k = i - 1;
        while (k >= 1){
            printf("%d", k);
            k--;
        }
        printf("\n");
        i++;
    }

    return 0;
```

}

Method: 4 (Using Do While loop)

```c
#include<stdio.h>

int main(){
    int i = 1;
    do{
        int j = 1;
        do{
            printf("%d", j);
            j++;
        } while (j <= i);

        int k = i - 1;
        do{
            printf("%d", k);
            k--;
        } while (k >= 1);
        printf("\n");
        i++;
    } while (i <= 5);

    return 0;
}
```