Practice Problem 1

Source Code

Lab 7 > lap report > C 1.c > main()

```c
#include<stdio.h>

int main(){
    int n;
    scanf("%d", &n);

    for(int i=0;i<n;i++){
        for(int j=0; j<n;j++){
            if(i==0 || i==(n-1) || j==0 || j==(n-1)) {
                printf("1 ");
            } else {
                printf("0 ");
            }
        }
        printf("\n");
    }
}
```

Input & Output

```
parvej@parvej:~/Documen
me/parvej/Documents/CSE
5
1 1 1 1 1
1 0 0 0 1
1 0 0 0 1
1 0 0 0 1
1 1 1 1 1
```

Practice Problem 2

Source Code

Lab 7 > lap report > C 2.c > main()

```c
#include<stdio.h>

int main(){
    int n;
    scanf("%d", &n);

    for(int i=1;i<=n;i++){
        for(int j=1; j<=i;j++){
            printf("%d", j);
        }
        printf("\n");
    }
    for(int i=1;i<=n;i++){
        for(int j=1; j<=(n-i);j++){
            printf("%d", j);
        }
        printf("\n");
    }
}
```

Input & Output

```
parvej@parvej:~/Documents/CSE
me/parvej/Documents/CSE ACADE
5

1
12
123
1234
12345
1234
123
12
1
```

Practice Problem 3

Source Code

Lab 7 > lap report > C 3.c > main()

```c
#include<stdio.h>

int main(){
    int n;
    scanf("%d", &n);
    printf("\n");

    for(int i=n; i>=1;i--){
        for(int j=n; j>=1; j--){
            if(i>=j){
            printf("%d", i);
            } else {
                printf("%d", j);
            }
        }
        printf("\n");
    }
}
```

Input & Output

```
parvej@parvej:~/Documents/C
me/parvej/Documents/CSE ACA
5

55555
54444
54333
54322
54321
```

Practice Problem 4

Source Code

Lab 7 > lap report > C 4.c > main()

```c
#include<stdio.h>

int main(){
    int n;
    scanf("%d", &n);

    for(int i=0;i<n;i++){
        for(int j=0; j<n;j++){
            if(i==(n/2) || j==(n/
                printf("0");
            } else {
                printf("1");
            }
        }
        printf("\n");
    }
}
```

Input & Output

```
parvej@parvej:~/I
me/parvej/Docume
5
11011
11011
00000
11011
11011
```

Practice Problem 5

Source Code

Lab 7 > lap report > C 5.c > main()

```c
#include <stdio.h>

int main()
{
    int n, sum = 0;
    scanf("%d", &n);

    for (int i = 2; i <= n; i++)
    {
        int isPrime = 1;
        for (int j = 2; j * j <= i; j++)
        {
            if (i % j == 0)
            {
                isPrime = 0;
                break;
            }
        }
        if (isPrime)
        {
            sum += i;
        }
    }

    printf("Sum: %d\n", n, sum);

    return 0;
}
```

Input & Output

```
parvej@parvej:~/[
eport/" && gcc 5.
5
Sum: 10
```