

C, C++, DSA in depth

Doubt class assignment 7,8

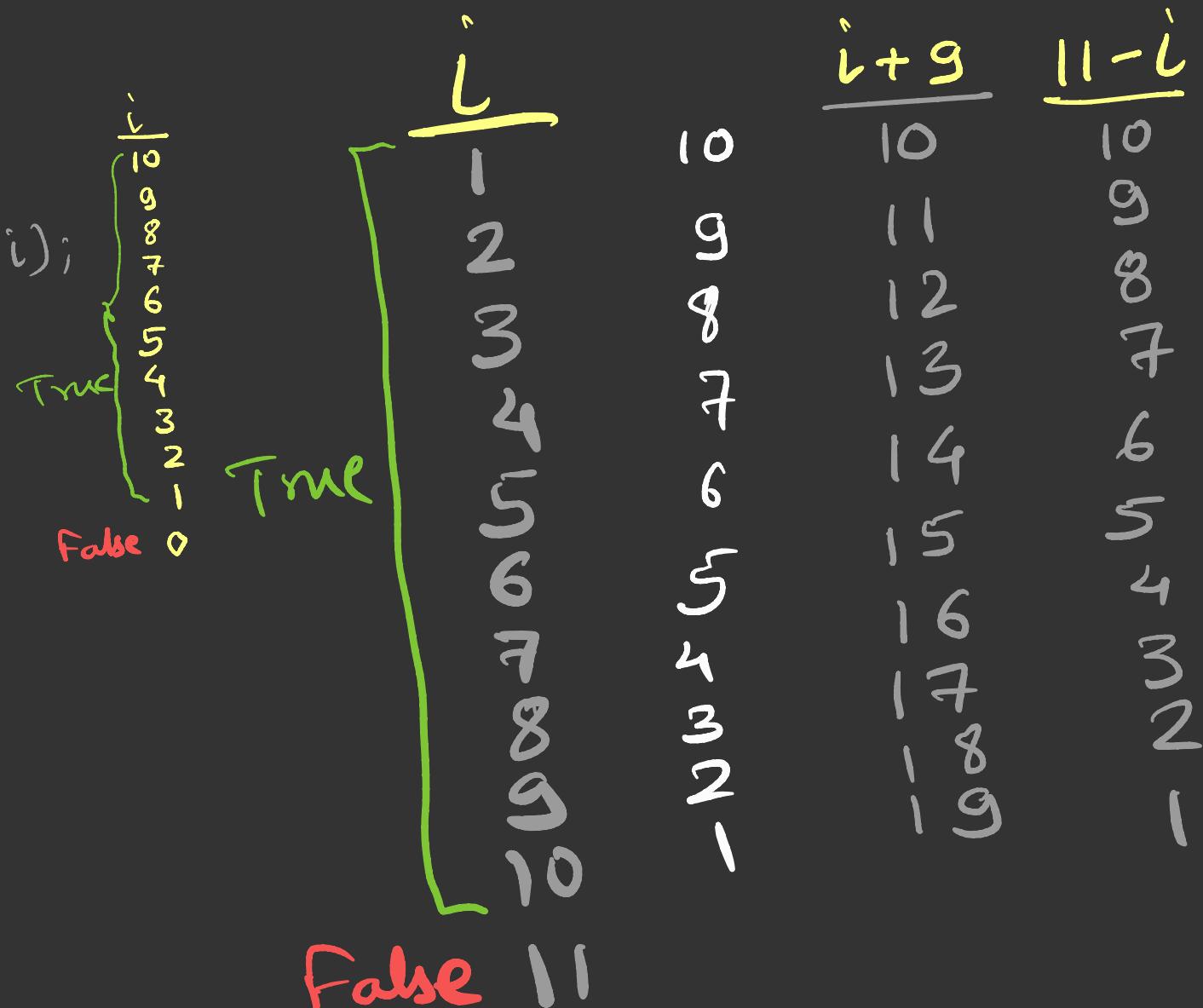


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Ans. 7  
Q. 3

```
i=10;  
while( i>=1 )  
{  
    printf(" %d ", i);  
    i--;  
}  
y
```

10 9 8 7 6 5 4 3 2 1



Ass. - 7

Q. 4

1 3 5 7 9

1. Read

2. Test case

3. Dry run

Write a program to print  
first 10 odd natural numbers

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20.  
\_\_\_\_\_  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ .....

1 3 5 7 9 11 13 15 17 19

i       $2 \times i - 1$   
1  
2  
3  
4  
5  
6  
7  
8  
9  
10

A<sub>88-5</sub><sup>7</sup>

19 17 15 13 11 9 7 5 3 1

①  $i = 19 \quad i = i - 2 \quad \text{printf}("y.d", i);$

②  $i = 10 \quad i-- \quad \overbrace{i >= 1}^{\text{printf}("y.d", 2*i-1);}$

③  $i = 1 \quad i++ \quad \text{printf}("y.d", 21-2*i);$

i  
1 19  
2 17  
3 15  
4 13  
5 11

i  
6 9  
7 8  
8 7  
9 5  
10 3  
11 1

19-i      Y  
18+i      Y

20-i      Y

20-(2i-1)

20-2i+1

21-2i

Ass. 7  
Q. 6

2 4 6 8 10 12 14 16 18 20

```
i=1;  
while(i<=10)  
{  
    printf("%d", 2*i);  
    i++;  
}
```

Ass-7  
a.7 20 18 16 14 12 10 8 6 4 2

<u>i</u>	<u>22-2i</u>
1	20
2	18
3	16
4	14
5	12
6	10
7	8
8	6
9	4
10	2

i = 20

while ( i >= 2 )  
{

    printf( "%d ", i );  
    i = i - 2;

}

Ass - 7  
Q. 8

1 4 9 16 25 36 49 64 81 100

```
i = 1;  
while ( i <= 10 )  
{  
    printf( " %d ", i * i );  
    i++;  
}
```

Ass - 7  
Q. 9

$i * i * i$

Ast - 7  
Q. 10

$$5 \times 1 = 5 \quad i = 1 \text{ to } 10$$

$$5 \times 2 = 10$$

$$5 \times 3 = 15$$

$$5 \times 4 = 20$$

$$5 \times 5 = 25$$

$$5 \times 6 = 30$$

$$5 \times 7 = 35$$

$$5 \times 8 = 40$$

$$5 \times 9 = 45$$

$$5 \times 10 = 50$$

printf("5 %d = %d", i, i\*5);

Ass-8

Q.4

First N odd natural number

$n = 10$

1 3 5 7 9 11 13 15 17 19

```
i=1  
printf("Enter a number");  
scanf(".d", &n);  
while(i<=n)  
{  
    printf(".d", 2*i-1);  
    i++;  
}
```

Ans - 8  
Ex. 8

$$1^2 \quad 2^2 \quad 3^2 \quad \dots \quad n^2$$

```
i = 1;  
printf("Enter a number");  
scanf("%d", &n);  
while (i <= n)  
{  
    printf("%d", i * i);  
    i++;
```



$i * i * i$

Ans - 8  
Ex. 9

