

## Pseudo code.

1) num = 6, k = 2, i = 2  
 while i <= number  
 1. iteration i = 2 (2 <= 6 is true)  
 $k = k + i = 2 + 2 = 4$   
 $i = i + 1 = 2 + 1 = 3$   
 2. Iteration i = 3 (3 <= 6 is true)  
 $k = k + i = 4 + 3 = 7$   
 $i = i + 1 = 3 + 1 = 4$   
 iteration i = 4 (4 <= 6 is true)  
 $k = k + i = 7 + 4 = 11$   
 $i = i + 1 = 4 + 1 = 5$   
 iteration i = 5 (5 <= 6 is true)  
 $k = k + i = 11 + 5 = 16$   
 $i = i + 1 = 5 + 1 = 6$   
 iteration i = 6 (6 <= 6 is true)  
 $k = k + i = 16 + 6 = 22$   
 $i = i + 1 = 6 + 1 = 7$   
 iteration i = 7 (7 <= 6 is false)  
 Ans = 22

2) Code will run infinite number of times

3) Set Value = " \* 10;  
 print value  
 → 10.

4) Set integer value = 10  
 set integer salary = 0  
 while (Value = 10) → 10 = 10 is true  
 $0 + 100 = 100$   
 $salary = salary + 100$   
 → Infinite loop.  $100 + 100 = 200$   
 $200 + 100 = 300$   
 $300 + 100 = 400$

5) n = 25  
 25 > 0 is true  
 if (25 > 0 and 25 <= 12) false  
 else if (25 > 12 and 25 <= 24) false  
 else if (25 > 24 and 25 <= 30) ~~false~~ true  
 $i = 25 - 1 = 24$   
 $24 - 1 = 23$       $23 - 1 = 22$

6) 90

7) 21

9) int x, y, z  
Set x=4, y=3, z=1  
if (x >> (z-1) && y << (z+1))  
    x = x + y  
else  
    y = x << z  
End if  
Print x - y + z

if (4 >> (1-1) && 3 << (1+1))  
5 - 3 + 1  
2 + 1 = 3

9) n = 10  
Sum = 0, i = 5  
i < n  
5 < 10 is true  
→ i < 10 (5 < 10 is true)  
Sum = Sum + i = 5 + 5 = 10  
→ 7 < 10, Sum + i = 10 + 7 = 17  
8 < 10, Sum + i = 17 + 8 = 25  
9 < 10, Sum + i = 25 + 9 = 34  
10 < 10 is false = 34

10) n = 35  
i = 0    35 % 10! = 0  
n = n + 3  
= 55

11) n = 26  
i = 0    n % 8! = 0    26 % 8! = 2    2! = 0  
n = n + 5 = 26 + 5 = 31  
31 + 5 = 36, 36 + 5 = 41, 41 + 5 = 46  
46 + 5 = 51, 51 + 5 = 56  
56 + 5 = 61  
n = n + i = 62

12) 15625



```

13. char c, a, b;
    c = 'r';           c = 102
    a = 's';           s = 115
    b = 'x';           b = 120
    int sum = c + a + b;    102 + 115 + 120
                           = 337

```

```

14) int fun(int a)
    {
        return a--;
    }
    int main()
    {
        int a = fun(5);
        print("%d", a++);
    }

```

15) Prep insta

```

16) int main()
    {
        int val = 5;
        do {
            val++;
            ++val;
        } while (val++ > 7);
        = 8
    }

```

```

17) int main()
    {
        char c = 'z';
        printf("%d", c);
    }

```

'z' = 90

```

18) for (i = 1; i <= 6; i++)
    for (j = i; j <= 6; j++)
        print blank space
    end for
    for (k = 1; k <= (i + 2); k++)
        print *
    End for
    line break

```