Sum of Digits

n = ~~263~~ 26

$$10 \overline{)\,26\,(\,2} \quad 20 \quad 6$$

① %.

```
int main()
{
    int n, sum=0;
    int rem;
    printf("Enter an int:");
    scanf("%d", &n);
    while(n>0)
    {
      rem= n%10;
      Sum= Sum +rem;
      n= n/10;
    }
    printf("Sum is %d", Sum);
    return 0;
}
```

n = ~~794~~ ~~79~~ 70

a. rem = 794%10 => 4
   Sum = 0+4 => 4

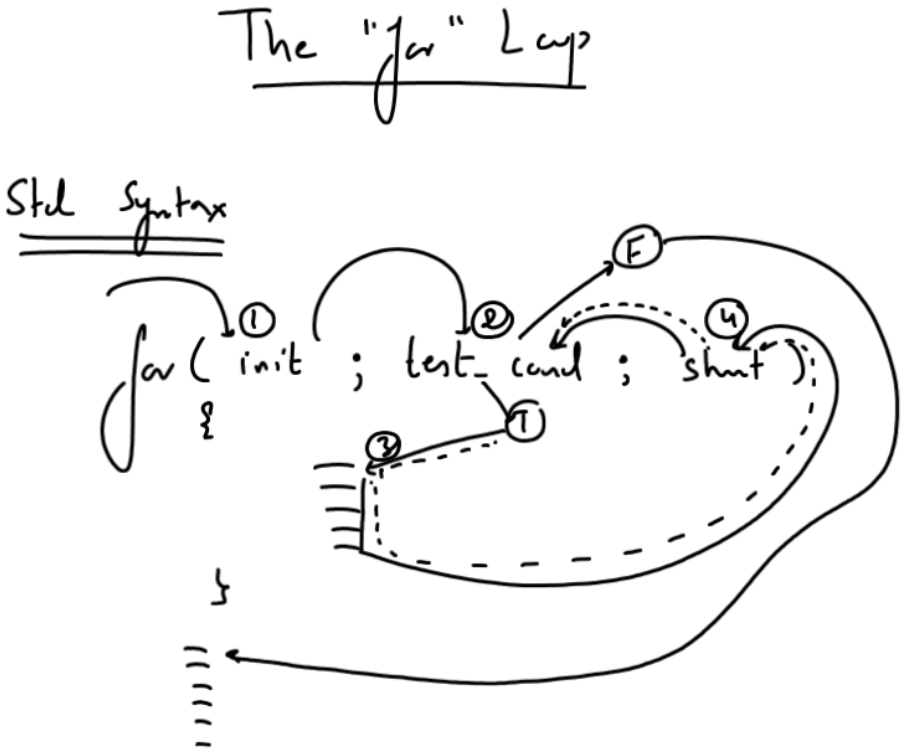
b. rem = 79%10 => 9
   Sum = 4+9 => 13

c. rem = 7%10 -> 7
   Sum = 13+7 -> 20

ASIGNMENTS
==========

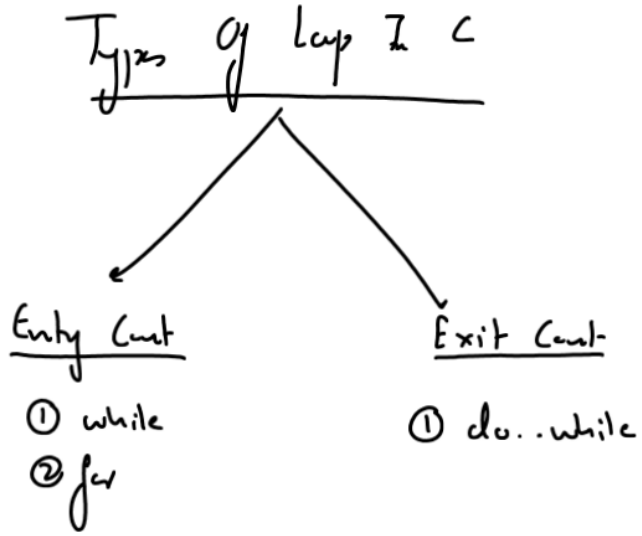
Qn1. WAP to accept an integer from the user and calc and print the sum of itsa first and last digit only.

Qn2. WAP to accept an integer from the user and print its REVERSE.



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

1
2
3
4
5
.
.
10



WAP to accept an int from the user and print all the nos from 1 to that number.

```
#include <stdio.h>
int main()
{
    int i,n;
    printf("Enter an int:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
        printf("\n%d",i);
    return 0;
}
```

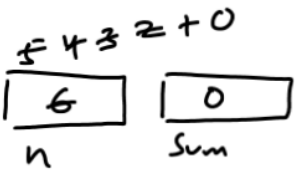
WAP to accept an int from the user and print the SUM of all the numbers from 1 to that number

```
#include <stdio.h>
int main()
{
    int i,n,sum=0;
    printf("Enter an int:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
        sum=sum+i;
    printf("sum is %d",sum);
    return 0;
}
```

Using 2 var only:

==========

```
#include <stdio.h>
int main()
{
    int n,sum;
    printf("Enter an int:");
    scanf("%d",&n);
    for(sum=0;n>=1;n--)
        sum=sum+n;
    printf("sum is %d",sum);
    return 0;
}
```



a) sum = 0 + 6 => 6

b) sum = 6 + 5 => 11

c) sum = 11 + 4 => 15

d) sum = 15 + 3 => 18

e) sum = 18 + 2 => 20

f) sum = 20 + 1 => 21

WAP to accept an int from the user and print the SUM of all the digits of that number

```
#include <stdio.h>
int main()
{
    int n,sum,rem;
    printf("Enter an int:");
    scanf("%d",&n);

    for(sum=0;n>0;n=n/10)
    {
        rem=n%10;
        sum=sum+rem;
    }
    printf("sum of digits is %d",sum);
    return 0;
}
```

WAP to accept an int from the user and check whether it is an ARMSTRONG number or not

```
#include <stdio.h>
int main()
{
   int n,sum,rem,a;
   printf("Enter an int:");
   scanf("%d",&n);
   a=n;
   for(sum=0;n>0;n=n/10)
   {
      rem=n%10;
      sum=sum+rem*rem*rem;
   }
   if(sum==a)
       printf("Number is armstrong");
  else
       printf("Number is not armstrong");
   return 0;
}
```

n = 153, sum = 0

a) rem = 153 % 10 -> 3
   sum = 0 + 27 => 27

b) rem = 15 % 10 -> 5
   sum = 27 + 125 -> 152

c) rem = 1 % 10 -> 1
   sum = 152 + 1 -> 153