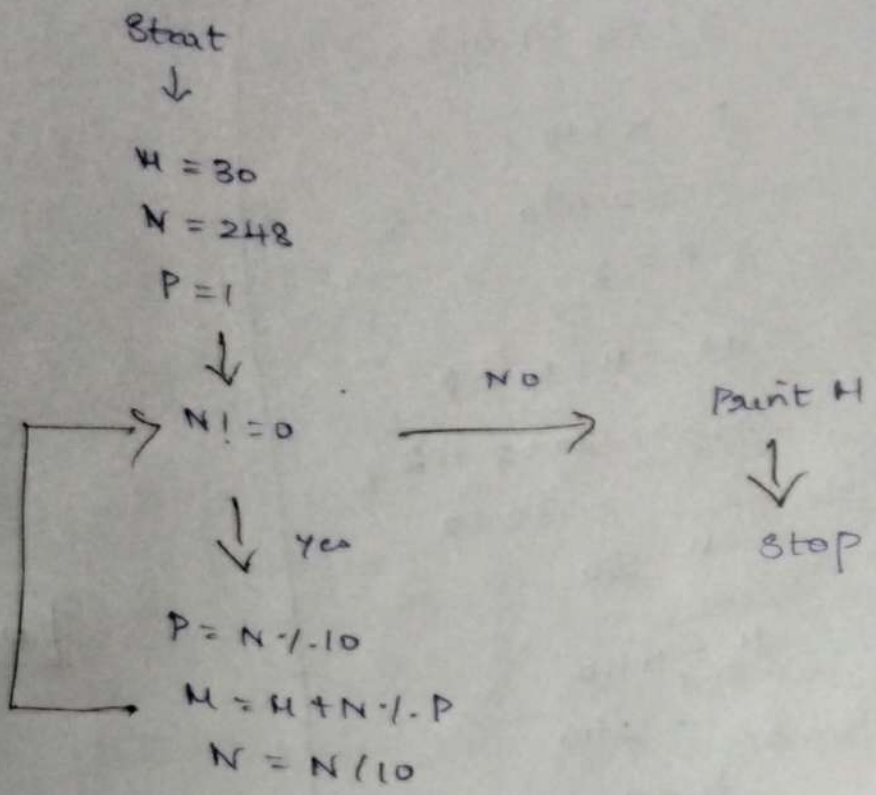
Q1.

Task



Soln.

S-1.

N ! = 0

248 ! = 0 (True)

P = N % 10

P = 248 % 10 ⇒ 8

P = 8

M = M + N % P

= 30 + 248 % 0

M = 30 + 0 ⇒ 30

M = 30

N = N / 10

= 248 / 10

N = 24

S-2.

N ! = 0

24 ! = 0 (True)

P = N % 10

P = 24 % 10

P = 4

M = M + N % P

= 30 + 24 % 4

= 30 + 0

M = 30

N = N / 10

= 24 / 10

N = 2

Q-3

N! = 0

2! = 0 (True)

P = N * 1 * 10

= 2 * 1 * 10

P = 2

M = M + N * 1 * P

= 30 + 2 * 1 * 2

= 30 + 0

M = 30

N = N | 10

= 2 | 10

N = 0

Q-4.

N! = 0

0! = 0 (False)

↓

Print M

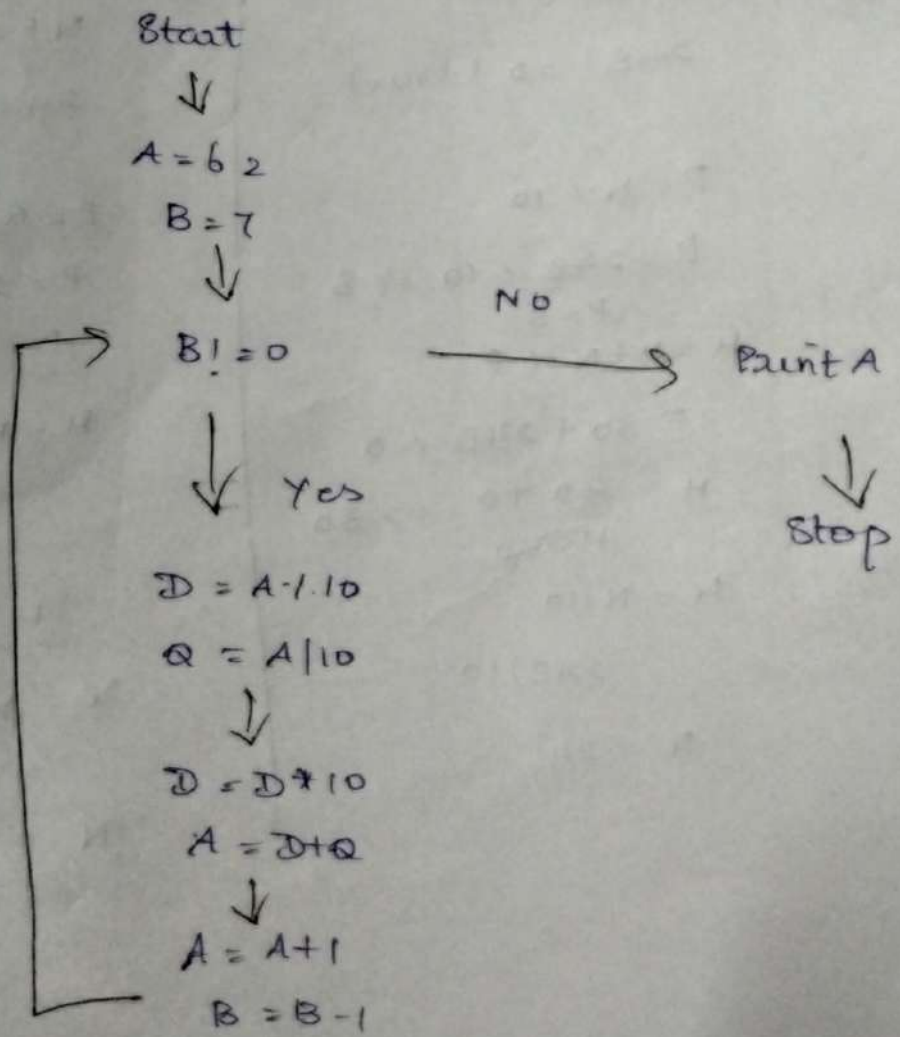
Exit (stop)

O/P:

M = 30

O/P ⇒ 30

Q2.



5-1.

A = 62

B = 7

B! = 0

7! = 0 (True)

D = A % 10

= 62 % 10

D = 2

Q = A // 10

= 62 // 10

Q = 6

D = D * 10

= 2 * 10

D = 20

A = D + Q

= 20 + 6

A = 26

A = A + 1

= 26 + 1

A = 27

B = B - 1

= 7 - 1

B = 6

5-2.

B! = 0

6! = 0 (True)

D = A % 10

= 27 % 10

D = 7

Q = A // 10

= 27 // 10

Q = 2

D = D * 10

= 7 * 10

D = 70

A = D + Q

= 70 + 2

A = 72

A = A + 1

72 + 1

A = 73

B = B - 1

= 6 - 1

B = 5

5-3.

B! = 0

5! = 0

D = A % 10

= 73 % 10

D = 3

Q = A // 10

= 73 // 10

Q = 7

D = D * 10

= 3 * 10

D = 30

A = D + Q

= 30 + 7

A = 37

A = A + 1

= 37 + 1

A = 38

B = B - 1

= 5 - 1

B = 4

S-4

B! = 0

4! = 0 (True)

D = A % 10

= 38 % 10

D = 8

Q = A / 10

= 38 / 10

Q = 3

D = D * 10

= 8 * 10

D = 80

A = D + Q

= 80 + 3

A = 83

A = A + 1

= 83 + 1

A = 84

B = B - 1

= 4 - 1

B = 3

S-5

B! = 0

3! = 0 (True)

D = A % 10

= 84 % 10

D = 4

Q = A / 10

= 84 / 10

Q = 8

D = D * 10

= 4 * 10

D = 40

A = D + Q

= 40 + 8

A = 48

A = A + 1

= 48 + 1

A = 49

B = B - 1

= 3 - 1

B = 2

S-6

B! = 0

2! = 0 (True)

D = A % 10

= 49 % 10

D = 9

Q = A / 10

= 49 / 10

Q = 4

D = D * 10

= 9 * 10

D = 90

A = D + Q

= 90 + 4

A = 94

A = A + 1

= 94 + 1

A = 95

B = B - 1

= 2 - 1

B = 1

S-7

B! = 0

1! = 0 (True)

D = A % 10

= 95 % 10

D = 5

Q = A / 10

= 95 / 10

Q = 9

D = D * 10

= 5 * 10

D = 50

A = D + Q

= 50 + 9

A = 59

A = A + 1

= 59 + 1

A = 60

B = B - 1

= 1 - 1

B = 0

↓

B! = 0

0! = 0 (Failed)

↓

print A

↓

Stop

O/P :

A = 60

O/P → 60

Q3.

int p, q, r

Set p = 5

q = 8

r = 4

p = 0101

q = 1000

r = 0100

q = 1001

~~p^q = (0101) ^ (1000)~~

p^q = (0101) ^ (1001)

p^q = 1100 (12)

10 + p = 10 + 5 = 15.

~~p = q + q~~

~~= 8 + 8~~

~~p = 16~~

if ((p^q) < (10 + p)) → T

(12 < 15)

p = q + q

= 8 + 8

p = 16

print p + q + r O/P:

16 + 8 + 4 = 28 //

O/P => 28

Q4.

```
Int funn(int a, int b)
```

a = 6

b = 7

b > a = 7 > 6 (true)

a > 3 = 6 > 3 (true)

```
if (b>a && a>3)
     T   &&  T  = T
```

↳ a = (b+1)+a

a = (7+1)+6

a = 14

b = 1+3+a

= 1+3+14

b = 18

```
return a-funn(b,b)
```

funn(18,18)

↳ a = 18

b = 18

```
if (b>a && a>3)
```

false

```
end if
return b-1
```

18-1 = 17

```
return a-fun(b,b)
```

14-17

return -3 //.

O/P ⇒ -3

Q5.

int a, b, c

Set a = 3

b = 4

c = 10

a = 10 + b

= 10 + 4

a = 14

if ((a+b+c) < (b+c+a))

(14 + 4 + 10) < (4 + 10 + 14))

28 < 28 False.

else

if ((b+c) < (c-b))

(4 + 10) < (10 - 4)

14 < 6 (False)

a = 10 + b

= 10 + 4

a = 14

a + b + c = 14 + 4 + 10

= 28 //.

O/P → 28