int printf(const char *, ...)

FEBRUARY - 2017

MO TU WE TH FR SA SU MO TU WE TH FR SA SU

1 2 3 4 5 6 7 8 9 10 11 12

13 14 15 16 17 18 19 20 21 22 23 24 25 26

27 28

(WK 03) • 019 346

JANUARY

THURSDAY

19

ellipsis:

↳ which represent any number and type of

Q1) Add two numbers without argument, using any operators or control statement.

```
int =5; y = 7, z;
z = printf("%c * c%c * c", x, ' ', y, ' ');
printf("\n sum = %d", z);
x = printf("Kiit")
value of x is 4 we use double quote for declaring string
printf("%d", x)
printf("%d %f", x, y)
```

%[flag][width][.prec][modifier]

[d conversion char]

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JANUARY 020-345 • (WK 03)

FRIDAY

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x = 25

:.0 5 f ← modifier

n ↑

flag width

+ ← we can use

-

□□□25 normal

If we use - minus then

25□□□

then three blank space

%% ^C

* is used as mask.

we use Star to hide Something

1st * = X

1st * = Y

[x = mass/width]

2017 C = x K baad Ka blackK liye

FEBRUARY - 2017

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(WK - 03) • 021-344

SATURDAY

JANUARY

21

but

that will be

(we can use character too.

so ("%*c %*c", x, ' ', y, ' ');

x=5 | y=7

x ka value | y ka value

i.e. %5c %7c

total 12 blank space print hoga jo z mai store hoga.

hence output is 12

SUNDAY 22

2017

② JANUARY

023-342 • (WK - 04)

23 MONDAY

array of string
Badua hai

DECEMBER - 2016

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• 9 ③ Check a number is even or odd without using %,
• 10 control statements and conditional operator.
• 11 - NO %, if, switch, for, while, do, goto.?
• 12

• 1

char *str[2] = {"Even", "odd"};

• 2

int n;

• 3

printf ("Enter a no:");

• 4 ~~array of strin~~

• 5 Scanf ("%d", &n);

• 6 printf ("%s", str[n&1]);

bit wise ④

2017

Corecion : The implection type conversion.

higest piroity in C {operator}

( ) [ ] (. →) member access operator

↳ function call operator

→ Subscripting operator

2nd operator {2nd in piroity)

↳ ~ ++ -- & *

(type) sizeof !

~~unar~~ vinary operator

accossiativity : same

pironty k under

ka sequence ka piroity

C.1.1

JANUARY 025 140 • (WK-04) WEDNESDAY 25

DECEMBER 2016

SU MO TU WE TH FR SA SU MO TU WE TH FR SA
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31

what is Name Mangling :-

Name of Variable can be same but Volume should

number and type of argument Should be different.

e.g :-

int Volume (int a) {
    (code)
}

int Volume (int a, int b, int c) {
    (code 2)
}

Stack Space mai Store hota hai

Symbole table mai Store hota

ye code mai Save hota Symbole table

in c++ alg alg Name of code mai Same hota. So that we can use multiple function Name with different size.

2017

void display()
{
}

JANUARY
THURSDAY
26

How to avoid name mangling?

why to avoid this?
↳ because we can call codes of c++ from C.

```
extern "C" void display()
{
}
```

JVM (Java)

JANUARY 027-338 • (WK - 04) FRIDAY

27

DECEMBER - 2016

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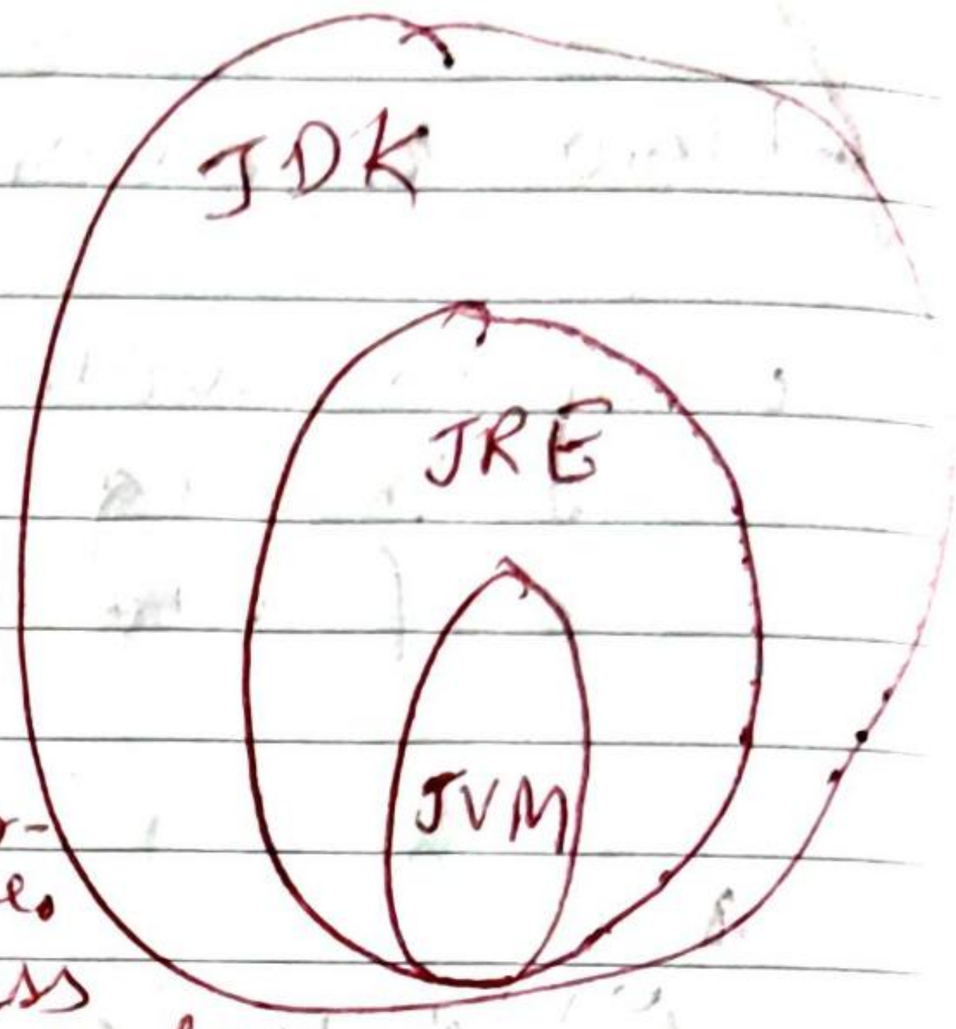
Work of JVM :-

1. Class Loader
2. Byte Code Verifier
3. Execution Engine



JNI → Java Native interface.
→ used to access native code.

Classloader

load all the class to run a Java program.

→ Bootstrap
→ Extension
→ System

Phyton

FEBRUARY 2017

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(WK. 04) • 028-337

SATURDAY

JANUARY

28

Execution Engine

1.

2.

3. Virtual Processor

different type of Squences in Phyton

list

String

byte array

Buki net

what is membership Operator

SUNDAY 29

In & not in

and

2017

JANUARY 030 335 • (WK 05)

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DECEMBER - 2016

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(83) Display "Hello" without main.

we can execute program without main but cannot show it.

(pre-processor operator)

* Stringize operator - #

* Token ~~Operato~~ pasting - ##

→ To Convert a ~~D~~c token into

Token → Smallest ~~error~~ element (variable/) of program

→ Combine token

2017

also a individual character → (m is here a token)

```
#include<stdio.h>
#define display m##a##k##i##n
main()
int (display())
{
  print("Hello");
}
```

will combine

Single #(hash) ⇒ is use as " "

Compiler cannot understand #(hash)

```
#define display(x) #x
  int main()
{
print (display(int));
}
```

"int"

FEBRUARY 032-333 • (WK - 05)

WEDNESDAY

01

JANUARY - 2017

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```
#define concat(a,b) a##b
fprintf concat(20,30)
2030
int main()
{
fprintf("%d", concat(20,30));
}
```

Output: 2030

MARCH 2017

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FEBRUARY

THURSDAY

02

Q) Determine if two integers are equal without using comparision and arithmetic operators and loops.

```
int a=5, b=7;          (using XOR)
if (!(a ^ b))          (1.2) Not Equal
                       (1.6) Equal
    printf("Equal");
else
    printf("Not Equal");
```

5 = a = 101

7 = b = 111

a ^ b = 010 → (2)

5 = a | 101
5 = b | 101
------
000 → (1)

7 = a | 111
7 = b | 111
------
000 → (6)

2017

FEBRUARY

FRIDAY

03

8) Display semicolon (;)
without using board and
a single ; in a program.

```
#include <stdio.h>
int main()
{
if(putchar(59))
{ }
}
```

59 ↑ ascii value of semicolon (;)

putchar } for display char
getchar }

↳ for input char

Integer value return
karta hai.

2017

MARCH - 2017

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(WK 05) • 035 330

SATURDAY

FEBRUARY

04

• 9 ~~How many characters it prod~~

• 10 "if" K under (kuch bhi) expression

• 11 hota hai waha semicolon

• 12 ~~ka~~ ja jurad nahi Kai

• 1 if(exp) ✓

• 2

(Statement;) ✗

• 3

• 4 agar "if ( )" K baad

• 5 bracket nahi diye

• 6 i.e. [if(){

}

] too semicolon lagna hoga

[if();]

2017

FEBRUARY 037-328 • (WW 06)

MONDAY

06

Q. display first 100 natural numbers without loop and defining any extra functions.

recursion ka use

```
#include <stdio.h>
int main()
{
  static int a = 1;
  if (a > 100)
    return 0;
  printf("%d ", a++);
  main();
}
```

we can use goto also.

goto is unstructed loop.

2017

MARCH - 2017

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(WK - 06) • 038-327

FEBRUARY

TUESDAY 07

Static definition

if a variable is static
it is created and initial once
till end of the program

FEBRUARY 039-326 • (WK - 06)

WEDNESDAY

08

JANUARY - 2017

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Q8 Convert a char to upper...

```
if (ch >= 65 && ch <= 90)
    ch = ch + 32;
else
    if (ch >= 97 && ch <= 122)
        ch = ch - 32;
```

If ch use name karo sakte hai

(Ans)

```
ch = ch ^ 32;
```

XOR

A = 65 = 01000001

32 = 00100000

^

01100001

⇒ 97 → now its askey value is small a.

MARCH - 2017

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(WK - 06) • 040-325

THURSDAY

FEBRUARY

09

a = 97 = 01100001

32 = 00100000

01000001 → 65

So its askey value is capital 'A';

MARCH - 2017

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Pseudo Code

(WK - 06) • 042-323

SATURDAY

FEBRUARY

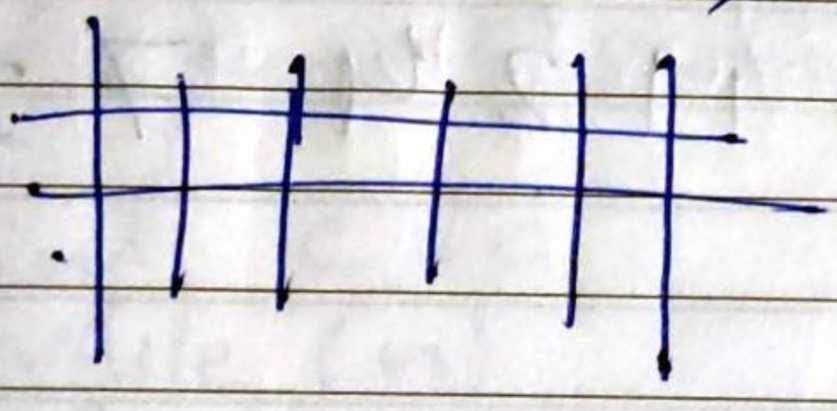
11

(1) • Harshad number → number which is divisible by sum of digit of number.

• Perfect number

• Strong number

(2) DRY Run (Pen paper)
put value and condition in one one column.



Leaders in array.
↳ all the element in right side

(3)

100 x 100

2

5050

SUNDAY 12

2017

23/08/21

MARCH - 2017

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(WK - 07) • 045-320

FEBRUARY

TUESDAY

14

8) WAP to count the number of ones in the binary representation of the given number.

//input : 10 output : 2.

↳ Cause binary representation of 10 is "1010"

(Program)

```
#include<stdio.h>
int count (int n)
{
   int  c=0
   while (n)
    {
      n=n  & (n-1);  // Important part of program
       c++;
    }
  return c;
}
int main ()
{
   int n;
   printf ("enter a number:");
   scanf ("%d",& n);
   printf ("Number of one : %d", count(n));
}
```

2017

FEBRUARY

15

046-319 • (WK 07)

WEDNESDAY

JANUARY - 2017

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22	23	24	25	26	27	28	29	30	31				

00001111 ⇒15

00001110 ⇒14

← first zero at 1st Position

00001110

00001101

So on...

check screenShot of

~~2~~ 23/08/21,, T2 folder,

Q WAP to check if the ith bit is set in the binary representation of the given number.

```
//input : 10      [If(bit) ⇒ ~~float~~ false ]
//output : 0                    ↑ Since zero
#include<stdio.h>
int check(int n, int i)
{
    if(n & (1<<i))
        return 1;
    else
        return 0;
}
int main()
{
    int n, i;
    printf("enter a number:");
    scanf("%d", &n);
    printf("Enter value of i:");
    scanf("%d", &i);
    if (check(n,i)){
```

FEBRUARY 048-317 • (WK · 07)

FRIDAY

17

JANUARY - 2017

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29	30	31											

Q // WAP to Set even bits (0 → 1) in a binary representation of a numbers.

```
#include<stdio.h>

int setbit(int n)
{
    int c=0, i, res=0;
for(i=n; i>0; i=i>>1)
    {
        if(c%2==1)
            res=res|(1<<c);
        c++;
    }
    return n|res
}
int main()
{
    int n, m;
    printf("enter a no: ");
```

2017