DAY-1

1. WACP to find the size of the processor using pointers.

A: Input:

#include <stdio.h>

int main() {

int \*ptr;

printf("the size of processor: %zu bytes \n", sizeof(ptr));

return 0;

}

Output:

the size of processor: 4 bytes (for a 32 bit system)

Or, the size of processor: 8 bytes (for a 64 bit system)

1. WACP to find largest number of 3 variables in one line.

A: Input:

#include <stdio.h>

int main() {

int a,b,c, largest;

Printf(“Enter 3 nos:”);

Scanf(“%d,%d,%d”,&a,&b,&c);

largest=(a>b)?((a>c)?a:c)☹(b>c)?b:c);

Printf(“The largest number is:%d”, largest);

return 0;

}

Output:

Enter 3 nos:10,30,50

The largest number is:50

1. WACP to swap 2 numbers without using add and minus operators as well as third variable and pointers.

A: Input:

#include <stdio.h>

Int main() {

Int a,b;

Printf(“Enter a and b :”);

Scanf(“%d,%d”,&a,&b);

A=a\*b,b=a/b,a=a/b;

Printf(“After swapping a=%d and b=%d”, a,b);

Return 0;

}

Output:

Enter a and b :10,20

After swapping a=20 and b=10

1. WACP to print statement without semicolon.

A: Input: (1st logic)

#include <stdio.h>

Int main() {

If(printf(“Hello world \n”)){}

Return 0;

}

Output: Hello world

1. WACP to find even or odd no without modulus.

A: Input:

#include <stdio.h>

Int main() {

Int n;

Printf(“Enter a no:”);

Scanf(“%d”,&n);

If((n/2)\*2==n){

Printf(“Even no”);}

Else{

Printf(“Odd no”);}

Return 0;

}

Output:

Enter a no:66

Even no

Or Input: (2nd logic)

#include <stdio.h>

Int main() {

Int n;

Printf(“Enter a no:”);

Scanf(“%d”,&n);

N=n-(n/10\*10);

If(n==2||n==4||n==0||n==6||n==8){

Printf(“Even no”);}

Else{

Printf(“Odd no”);}

Return 0;

}

Output:

Enter a no:87

Odd no

1. WACP to swap 2 numbers using XOR in one line.

A: Input:

#include <stdio.h>

Int main() {

Int a,b;

Printf(“Enter a and b:”);

Scanf(“%d,%d”,&a,&b);

A=a^b,b=a^b,a=a^b;

Printf(“a=%d and b=%d”,a,b);

Return 0;

}

Output:

Enter a and b:57,38

A=38 and b=57

1. WACP to swap 2 numbers using XOR without commas in one line.

A: Input:

#include <stdio.h>

Int main() {

Int a,b;

Printf(“Enter a and b:”);

Scanf(“%d,%d”,&a,&b);

A^=b^=a^=b;

Printf(“a=%d and b=%d”,a,b);

Return 0;

}

Output :

Enter a and b:36,95

A=95 and b=36