1. **Write a C program to determine the given number is odd or even using Bitwise operators.**

#include <stdio.h>

int main()

{

int a;

scanf("%d",&a);

if(a&1)

printf("Odd");

else

printf("Even");

return 0;

}

1. **Write a C program to count the number of bits set in a number.**

#include <stdio.h>

int main()

{

int a;

scanf("%d",&a);

int count=0;

while(a!=0)

{

if(a%2==1)

count++;

a=a/2;

}

printf("Count of Set bits:%d",count);

return 0;

}

1. **Write a C program to swap two numbers. Use a function pointer to do this operation.**

void swap(int \*a, int \*b) {

int temp = \*a;

\*a = \*b;

\*b = temp;

}

int main() {

int a,b;

scanf("%d %d",&a,&b);

void (\*ptr)(int \*, int \*)=swap;

ptr(&a, &b);

printf("%d %d", a, b);

return 0;

}

1. **Write an equivalent pointer expression for fetching the value of array element a[i][j][k][2]**

\*(\*(\*(\*(a + i) + j) + k) + 2)

1. **Write a C program to Multiply two matrix (n\*n) using pointers.**

#include <stdio.h>

float matm(float a,float b)

{

return a\*b;

}

int main()

{

float a[3][3],b[3][3];

for(int i=0;i<3;i++)

for(int j=0;j<3;j++)

scanf("%f",&a[i][j]);

for(int i=0;i<3;i++)

for(int j=0;j<3;j++)

scanf("%f",&b[i][j]);

float (\*ip)(float,float);

ip=matm;

for(int i=0;i<3;i++)

{

for(int j=0;j<3;j++)

{

printf("%f ",ip(a[i][j],b[i][j]));

}

printf("\n");

}

return 0;

}

A screenshot of a computer code

Description automatically generated

**ANSWER:8**

**A screenshot of a computer code

Description automatically generated**

**ANSWER:24**

**A screenshot of a white board with blue text

Description automatically generated**

**ANSWER:87654321**