

Set Data Structure And Set Operations(union, intersection and difference) Using Bit String

```
#include <stdio.h>

int main()
{
    int a,b,r,i;

    int a1[5],b1[5],c1[5],d1[5];

    for(i=0;i<5;i++)
    {
        a1[i]=0;

        b1[i]=0;

        c1[i]=0;
    }

    printf("Enter the first number:");

    scanf("%d",&a);

    for(i=0;i<5;i++)
    {
        r=a%2;

        a1[i]=r;

        a=a/2;
    }

    printf("\n");

    for(i=0;i<5;i++)
    {
        printf("%d",a1[i]);
    }
}
```

```
printf("\nEnter the second number:");

scanf("%d",&b);

for(i=0;i<5;i++)

{

    r=b%2;

    b1[i]=r;

    b=b/2;

}

printf("\n");

for(i=0;i<5;i++)

{

    printf("%d",b1[i]);

}

for(i=0;i<5;i++)

{

    c1[i]=a1[i]&b1[i];

    d1[i]=a1[i]|b1[i];

}

printf("\nResult of bitwise AND:");

for(i=0;i<5;i++)

{

    printf("%d",c1[i]);

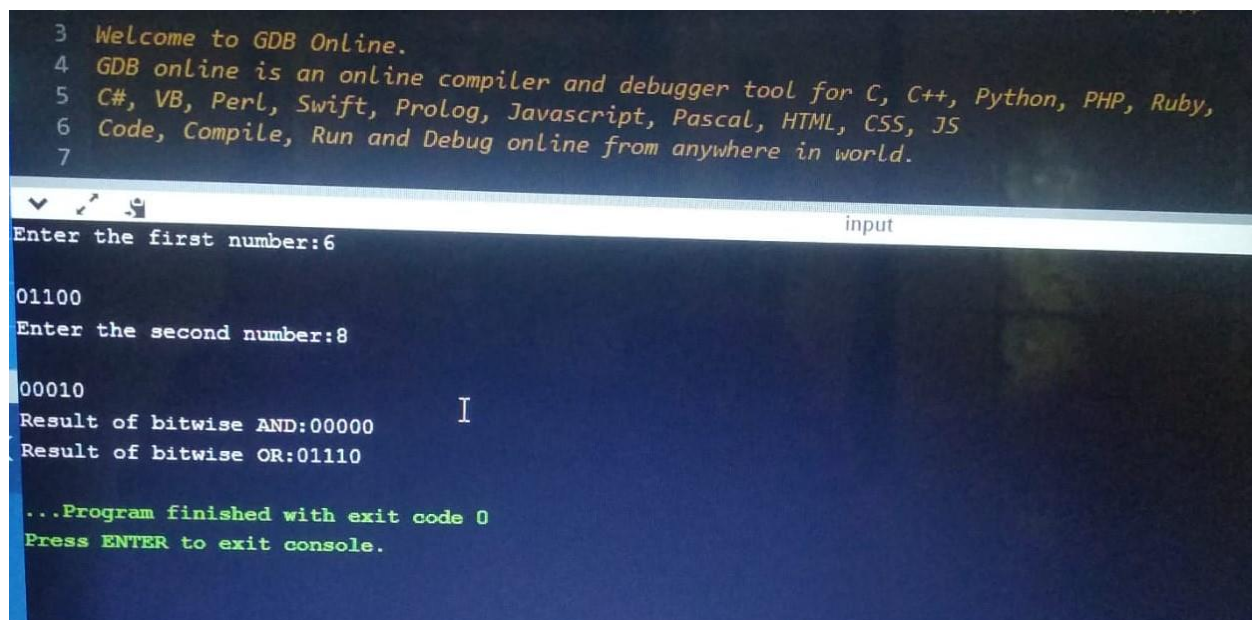
}

printf("\nResult of bitwise OR:");

for(i=0;i<5;i++)
```

```
{  
    printf("%d",d1[i]);  
}  
  
}
```

OUTPUT



```
3 Welcome to GDB Online.  
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5 C#, VB, Perl, Swift, Prolog, Javascript, Pascal, HTML, CSS, JS  
6 Code, Compile, Run and Debug online from anywhere in world.  
7  
Enter the first number:6  
01100  
Enter the second number:8  
00010  
Result of bitwise AND:00000  
Result of bitwise OR:01110  
...Program finished with exit code 0  
Press ENTER to exit console.
```