

1. Add Two Integers

IPO:

Input: Two integers

Process: Add the integers

Output: Sum of integers

```
#include<stdio.h>

int main(){
    int a,b,sum;
    printf("Enter two integers: ");
    scanf("%d%d",&a,&b);
    sum=a+b;
    printf("Sum=%d",sum);
    return 0;
}
```

Output:

Enter two integers: 4 5

Sum=9

2. Swap Two Numbers Using Temporary Variable

IPO:

Input: Two integers

Process: Swap using temporary variable

Output: Swapped values

```
#include<stdio.h>

int main(){
    int a,b,temp;
    printf("Enter two numbers: ");
    scanf("%d%d",&a,&b);
    temp=a;
    a=b;
    b=temp;
    printf("After swapping: a=%d b=%d",a,b);
    return 0;
}
```

Output:

Enter two numbers: 3 7

After swapping: a=7 b=3

3. Swap Two Numbers Without Temporary Variable

IPO:

Input: Two integers

Process: Swap using arithmetic operations

Output: Swapped values

```
#include<stdio.h>

int main(){
    int a,b;
    printf("Enter two numbers: ");
    scanf("%d%d",&a,&b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("After swapping: a=%d b=%d",a,b);
    return 0;
}
```

Output:

Enter two numbers: 5 9

After swapping: a=9 b=5

4. Find ASCII Value of a Character

IPO:

Input: A character

Process: Find ASCII using %d

Output: ASCII value

```
#include<stdio.h>
```

```
int main(){
```

```
    char ch;
```

```
    printf("Enter a character: ");
```

```
    scanf(" %c",&ch);
```

```
    printf("ASCII value of %c=%d",ch,ch);
```

```
    return 0;
```

```
}
```

Output:

Enter a character: A

ASCII value of A=65

5. Area and Perimeter of Rectangle

IPO:

Input: Length and breadth

Process: $\text{Area} = \text{length} \times \text{breadth}$, $\text{Perimeter} = 2(\text{length} + \text{breadth})$

Output: Area and perimeter

```
#include<stdio.h>
```

```
int main(){
```

```
    float l,b,area,peri;
```

```
    printf("Enter length and breadth: ");
```

```
    scanf("%f%f",&l,&b);
```

```
    area=l*b;
```

```
    peri=2*(l+b);
```

```
    printf("Area=%.2f Perimeter=%.2f",area,peri);
```

```
    return 0;
```

```
}
```

Output:

Enter length and breadth: 5 3

Area=15.00 Perimeter=16.00

6. Compute Simple Interest

IPO:

Input: Principal, rate, time

Process: $SI = (PRT)/100$

Output: Simple interest

```
#include<stdio.h>
```

```
int main(){
```

```
    float p,r,t,si;
```

```
    printf("Enter principal, rate, time: ");
```

```
    scanf("%f%f%f",&p,&r,&t);
```

```
    si=(p*r*t)/100;
```

```
    printf("Simple Interest=%.2f",si);
```

```
    return 0;
```

```
}
```

Output:

Enter principal, rate, time: 1000 5 2

Simple Interest=100.00

7. Celsius to Fahrenheit

IPO:

Input: Temperature in Celsius

Process: $F = (C * 9/5) + 32$

Output: Temperature in Fahrenheit

```
#include<stdio.h>
```

```
int main(){
```

```
    float c,f;
```

```
    printf("Enter temperature in Celsius: ");
```

```
    scanf("%f",&c);
```

```
    f=(c*9/5)+32;
```

```
    printf("Fahrenheit=%.2f",f);
```

```
    return 0;
}
```

Output:

Enter temperature in Celsius: 25

Fahrenheit=77.00

8. Find Quotient and Remainder

IPO:

Input: Dividend and divisor

Process: Quotient=dividend/divisor, Remainder=dividend%divisor

Output: Quotient and remainder

```
#include<stdio.h>
```

```
int main(){
```

```
    int a,b,q,r;
```

```
    printf("Enter dividend and divisor: ");
```

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

```
    q=a/b;
```



```
    r=a%b;
    printf("Quotient=%d Remainder=%d",q,r);
    return 0;
}
```

Output:

Enter dividend and divisor: 17 5

Quotient=3 Remainder=2

9. Check Number is Even or Odd

IPO:

Input: An integer

Process: If $\text{num} \% 2 == 0 \rightarrow$ even else odd

Output: Even or Odd

```
#include<stdio.h>
```

```
int main(){
```

```
    int n;
```

```
    printf("Enter a number: ");
```

```
scanf("%d",&n);  
if(n%2==0)  
    printf("Even");  
else  
    printf("Odd");  
return 0;  
}
```

Output:

Enter a number: 6

Even

10. Square and Cube of a Number

IPO:

Input: An integer

Process: Square= nn , Cube= $nn*n$

Output: Square and cube

```
#include<stdio.h>
```

```
int main(){  
    int n,sq,cu;  
    printf("Enter a number: ");  
    scanf("%d",&n);  
    sq=n*n;  
    cu=n*n*n;  
    printf("Square=%d Cube=%d",sq,cu);  
    return 0;  
}
```

Output:

Enter a number: 4

Square=16 Cube=64