

Admission criteria

```
#include<stdio.h>
void main(){
    int age,mark;
    printf("Enter the age and marks \n");
    scanf("%d",&age);
    scanf("%d",&mark);
    if(age>=18)
    {
        if(mark>=50)
            printf("Student meets admission criteria");
        else
            printf("Student does not meets admission criteria");
    }
    else
        printf("Student does not meets admission criteria");
}
```

```
PS D:\projects\quest\C> cd "d:\projects\quest\C" ; if ($?) { gcc admission.c -o admission } ; if ($?) { .\admission }
Enter the age and marks
18 50
Student meets admission criteria
PS D:\projects\quest\C> █
```

Arithmetics

```
#include<stdio.h>
void main(){
    int a,b;
    scanf("%d",&a);
    scanf("%d",&b);
    printf("Sum is %d \n",a+b);
    printf("Difference is %d \n",a-b);
    printf("Product is %d \n",a*b);
    printf("Quotient is %d \n",a/b);
    printf("Modulus is %d \n",a%b);
}
```

```
PS D:\projects\quest\C> cd "d:\projects\quest\C" ; if ($?) { gcc arithmetic.c -o arithmetic } ; if ($?) { .\arithmetic }
20
5
Sum is 25
Difference is 15
Product is 100
Quotient is 4
Modulus is 0
PS D:\projects\quest\C> █
```

Avg of 5 numbers

```
#include<stdio.h>

void main() {
    int a[5],sum=0;
    for ( int i = 0; i < 5; i++)
    {
        scanf("%d",&a[i]);
        sum+=a[i];
    }
    printf("Avg is %d",sum/5);
}

PS D:\projects\quest\C> cd "d:\projects\quest\C" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
5 6 7 8 9
Avg is 7
PS D:\projects\quest\C> █
```

Area and circumference of circle

```
#include<stdio.h>

void main() {
    int r;
    float c,a;
    scanf("%d",&r);
    a=(22*r*r)/7;
    c=(2*22*r)/7;
    printf("Area is %f\n ",a);
    printf("Circumference is %f",c);
}

PS D:\projects\quest\C> cd "d:\projects\quest\C" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
14
Area is 616.000000
Circumference is 88.000000
PS D:\projects\quest\C> █
```

Compound interest

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

void main() {
    int p,r,n,A;
    scanf("%d",&p);
    scanf("%d",&r);
    scanf("%d",&n);
    A = p * pow((1 + r / 100),n);
    printf("Principle is %d\n",p);
}
```

```

    printf("Rate is %d\n",r);
    printf("Time period is %d\n",n);
    printf("Compund interest is %d\n",A);
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc compound.c -o compound } ; if ($?) { .\compound }
1000
5
4
Principle is 1000
Rate is 5
Time period is 4
Compund interest is 1000
PS D:\projects\quest\C> █

```

Divisibility between two numbers

```

#include<stdio.h>
void main()
{
    int a,b;
    printf("Enter the values\n");
    scanf("%d",&a);
    scanf("%d",&b);
    if(a%b==0)
    printf("a is divisible by b\n");
    else
    printf("a is not divisible by b\n");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc divisibility.c -o divisibility } ; if ($?) { .\divisibility }
Enter the values
12 3
a is divisible by b
PS D:\projects\quest\C> █

```

Calculate hypotenuse using length and breadth

```

#include<stdio.h>
#include<math.h>
void main() {
    int l,b;
    float h;
    scanf("%d",&l);
    scanf("%d",&b);
    h=pow(pow(l,2)+pow(b,2),.5);
    printf("%f",h);
}

```

```
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc hypo.c -o hypo } ; if ($?) { .\hypo }  
4 3  
5.000000  
PS D:\projects\quest\C> █
```

Largest using relational operators

```
#include<stdio.h>  
void main(){  
    int a,b,c;  
    printf("Enter the three numbers\n");  
    scanf("%d",&a);  
    scanf("%d",&b);  
    scanf("%d",&c);  
    if(a>b){  
        if(a>c)  
            printf("a is the largest number");  
        else  
            printf("c is the largest number");  
    }  
    else{  
        if(b>c)  
            printf("b is the largest number");  
        else  
            printf("c is the largest number");  
    }  
}
```

```
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc largest.c -o largest } ; if ($?) { .\largest }  
Enter the three numbers  
3 4 5  
c is the largest number  
PS D:\projects\quest\C> █
```

Leap year

```
#include<stdio.h>  
void main(){  
    int year;  
    printf("Enter the year\n");  
    scanf("%d",&year);  
    if(year%100==0)  
    {  
        if(year%400==0)  
            printf("It is a leap year");  
    }
```

```

        else
            printf("Its not a leap year");
    }
    else if(year %4 == 0)
        printf("Its a leap year");
    else
        printf("Its not a leap year");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc leap.c -o leap } ; if ($?) { .\leap }
Enter the year
2012
Its a leap year
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc leap.c -o leap } ; if ($?) { .\leap }
Enter the year
2000
It is a leap year
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc leap.c -o leap } ; if ($?) { .\leap }
Enter the year
3000
Its not a leap year
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc leap.c -o leap } ; if ($?) { .\leap }
Enter the year
1998
Its not a leap year
PS D:\projects\quest\C> █

```

Password length

```

#include<stdio.h>
void main()
{
    int len;
    printf("Enter length of password\n");
    scanf("%d", &len);
    if(len>=8)
        printf("Meets minimum requirement");
    else
        printf("Does not meet minimum requirement");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc passlen.c -o passlen } ; if ($?) { .\passlen }
Enter length of password
15
Meets minimum requirement
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc passlen.c -o passlen } ; if ($?) { .\passlen }
Enter length of password
8
Meets minimum requirement
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc passlen.c -o passlen } ; if ($?) { .\passlen }
Enter length of password
3
Does not meet minimum requirement
PS D:\projects\quest\C> █

```

Profit or loss

```
#include<stdio.h>

void main() {
    int cp,sp;
    scanf("%d",&cp);
    scanf("%d",&sp);
    if(cp>sp) {
        printf("loss is %d",cp-sp);
    }
    else if( sp>cp){
        printf("profit is %d",sp-cp);
    }
    else
        printf("Neither profit nor loss");
}
```

```
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc profitloss.c -o profitloss } ; if ($?) { .\profitloss }
10
20
profit is 10
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc profitloss.c -o profitloss } ; if ($?) { .\profitloss }
10
10
loss is 10
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc profitloss.c -o profitloss } ; if ($?) { .\profitloss }
10
10
Neither profit nor loss
PS D:\projects\quest\C> █
```

Rectangle area

```
#include<stdio.h>

void main() {
    int l,b;
    scanf("%d",&l);
    scanf("%d",&b);
    printf("Area is %d",l*b);
}
```

```
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
10 20
Area is 200
PS D:\projects\quest\C> █
```

Greater than,less than or equal

```
#include<stdio.h>
void main(){
    int a,b;
    scanf("%d",&a);
    scanf("%d",&b);
    if(a==b)
        printf("a is equal to b\n");
    else
        printf("a not equal to b\n");
    if(a>b)
        printf("a greater than b\n");
    else if(b>a)
        printf("b greater than a\n");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc relational2.c -o relational2 } ; if ($?) { .\relational2 }
12 15
a not equal to b
b greater than a
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc relational2.c -o relational2 } ; if ($?) { .\relational2 }
10 10
a is equal to b
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc relational2.c -o relational2 } ; if ($?) { .\relational2 }
20
15
a not equal to b
a greater than b
PS D:\projects\quest\C> █
```

Student marks

```
#include<stdio.h>
void main()
{
    int a,b;
    printf("Enter mark of a & b\n");
    scanf("%d",&a);
    scanf("%d",&b);
    if(a>b)
        printf("a scored higher marks than b");
    else if(b>a)
        printf("b scored higher marks than a");
    else
        printf("Both a and b scored the same mark");
}
```

```

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter mark of a & b
10 20
b scored higher marks than a
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc student.c -o student } ; if ($?) { .\student }
Enter mark of a & b
20
10
a scored higher marks than b
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc student.c -o student } ; if ($?) { .\student }
Enter mark of a & b
30 30
Both a and b scored the same mark
PS D:\projects\quest\C>

```

Sum of digits

```

#include<stdio.h>

void main() {
    int n,sum=0;
    scanf("%d",&n);
    while (n!=0)
    {
        sum = sum + n%10;
        n = n/10;
    }
    printf("Sum of digits is %d",sum);
}

```

```

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
156
Sum of digits is 12
PS D:\projects\quest\C>

```

Swap without using 3rd variable

```

#include<stdio.h>

void main() {
    int a ,b;
    scanf("%d",&a);
    scanf("%d",&b);
    printf("Value of a is %d\n",a);
    printf("Value of b is %d\n",b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("Value of a is %d\n",a);
    printf("Value of b is %d",b);
}

```



```

}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc swap.c -o swap } ; if ($?) { .\swap }
10 7
Value of a is 10
Value of b is 7
Value of a is 7
Value of b is 10
PS D:\projects\quest\C> 

```

Temperature Alert

```

#include<stdio.h>

void main() {
    int temp;
    printf("Enter temperature\n");
    scanf("%d", &temp);
    if (temp>40)
        printf("Alert temperature exceeded threshold");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempalert.c -o tempalert } ; if ($?) { .\tempalert }
Enter temperature
18
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempalert.c -o tempalert } ; if ($?) { .\tempalert }
Enter temperature
52
Alert temperature exceeded threshold
PS D:\projects\quest\C> 

```

Celsius to fahrenheit

```

#include<stdio.h>

void main() {
    float c, f;
    scanf("%f", &c);
    f=((c*9)/5)+32;
    printf("Temp is farenhite is %f", f);
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
27
Temp is farenhite is 80.599998
PS D:\projects\quest\C> 

```

Valid triangle

```

#include<stdio.h>

void main() {
    int a, b, c;
    scanf("%d", &a);
    scanf("%d", &b);
    scanf("%d", &c);
}

```

```

    if(a+b>c && b+c>a && a+c>b)
        printf("It is a valid triangle");
    else
        printf("It is not a valid triangle");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
10 20 15
It is a valid triangle
PS D:\projects\quest\C>

```

Vote eligibility

```

#include<stdio.h>
void main() {
    int age;
    printf("Enter age\n");
    scanf("%d", &age);
    if(age>=18)
        printf("Eligible to vote");
    else
        printf("Not eligible to vote");
}

PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter age
18
Eligible to vote
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter age
7
Not eligible to vote
PS D:\projects\quest\C> cd "d:\projects\quest\C\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter age
59
Eligible to vote
PS D:\projects\quest\C>

```

Ln 1, Col 1 (196 selected) Spaces: 4 UTF-8 CRLF {} C Go L