

1. Write a C program to add two integers

IPO:

Input- input a two integers say a,b

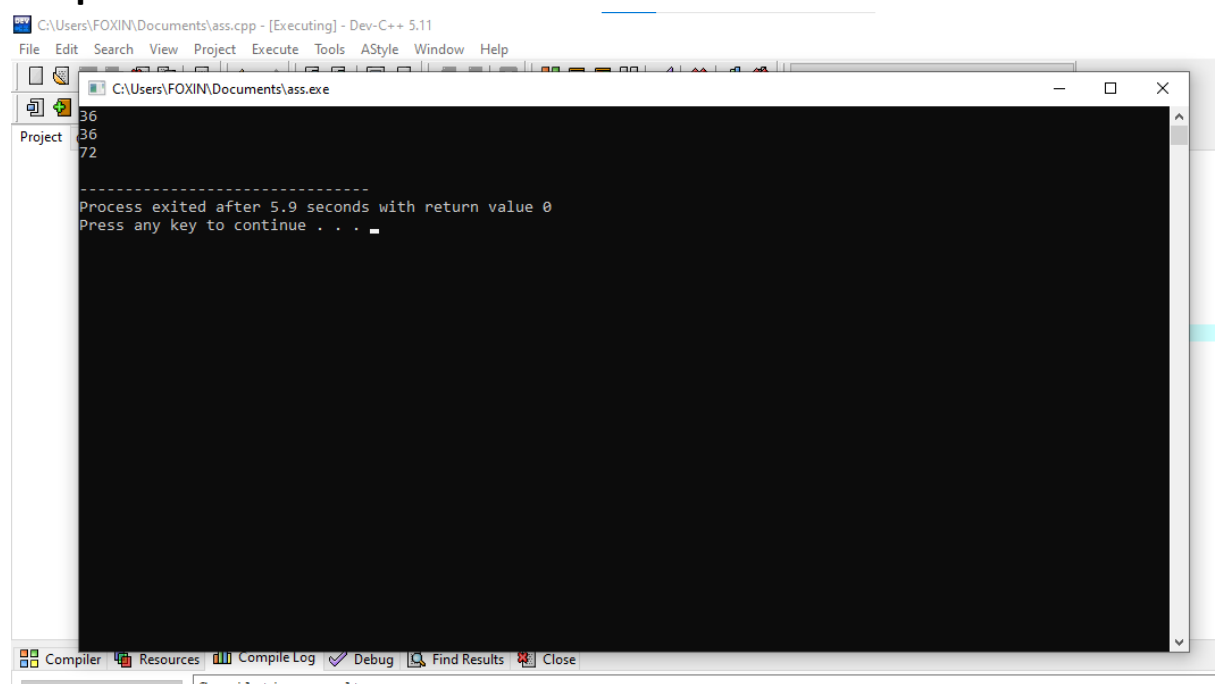
Process- add the two integers $\text{sum} = a + b$

Output- print the sum

Code:

```
#include<stdio.h>
int main()
{
    int a,b,sum=0, getch;
    scanf("%d%d",&a,&b);
    sum=a+b;
    printf("%d\n",sum);
    getch;
    return 0;
}
```

Output:



2. Write a program to swap two numbers using a temporary variable.

IPO:

Input- input a number say a,b

Process-use a temporary variable to swap cases

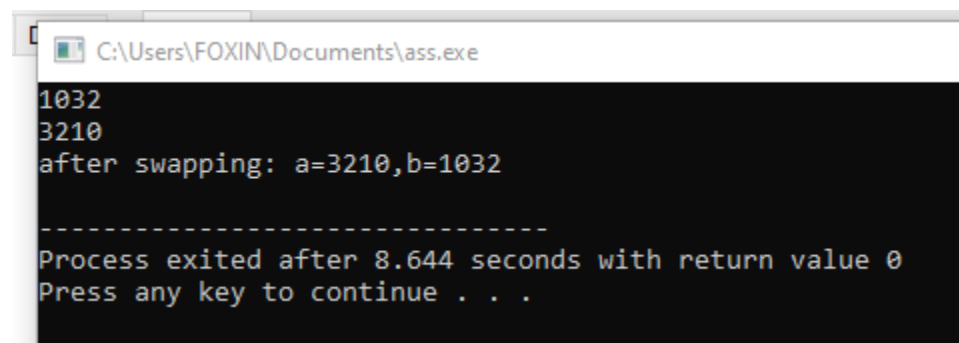
Output-print the numbers after swapping

Code:

```
#include<stdio.h>

int main()
{
    int a,b,temp, getch;
    scanf("%d%d",&a,&b);
    temp=a;
    a=b;
    b=temp;
    printf("after swapping: a=%d,b=%d\n",a,b);
    getch;
    return 0;
}
```

Output:



```
C:\Users\FOXIN\Documents\ass.exe
1032
3210
after swapping: a=3210,b=1032
-----
Process exited after 8.644 seconds with return value 0
Press any key to continue . . .
```

3. Write a program to swap two numbers without using a temporary variable.

IPO:

Input-input a number say a,b

Process-use without temporary variable to swap cases

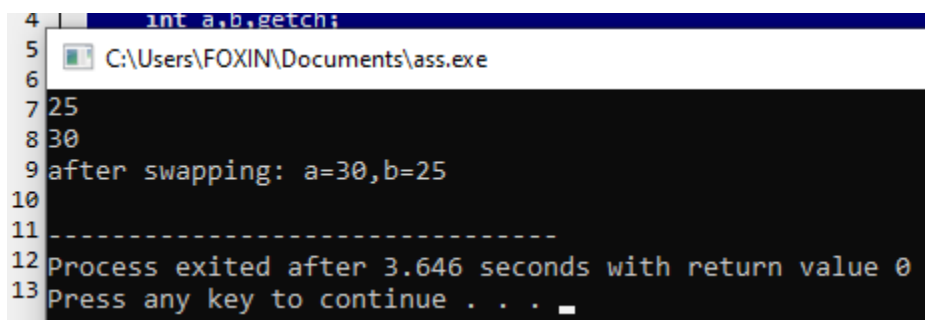
Output-print after swapping numbers

Code:

```
#include<stdio.h>

int main()
{
    int a,b, getch;
    scanf("%d%d",&a,&b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("after swapping: a=%d,b=%d\n",a,b);
    getch;
    return 0;
}
```

Output:



The screenshot shows a C++ IDE with a dark theme. The code editor displays the program code. The output window shows the execution results. The program prompts for two numbers, 25 and 30, and then prints the swapped values, 30 and 25. The process exits after 3.646 seconds with a return value of 0.

```
4 | int a,b, getch;
5 | C:\Users\FOXIN\Documents\ass.exe
6 |
7 | 25
8 | 30
9 | after swapping: a=30,b=25
10 |
11 | -----
12 | Process exited after 3.646 seconds with return value 0
13 | Press any key to continue . . . _
```

4. Write a program to find the ASCII value of a character

IPO:

Input-input a character ch

Process-convert the character to its ASCII value

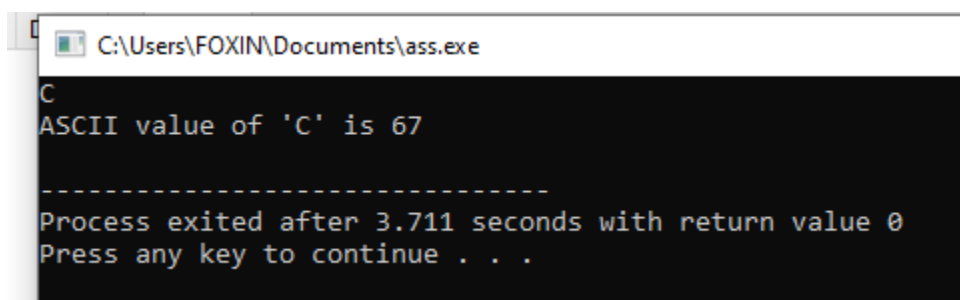
Output-print the ASCII value of given char

Code:

```
#include<stdio.h>

int main()
{
    int getch;
    char ch;
    scanf("%c",&ch);
    printf("ASCII value of '%c' is %d\n", ch,ch);
    getch;
    return 0;
}
```

Output:



```
C
ASCII value of 'C' is 67
-----
Process exited after 3.711 seconds with return value 0
Press any key to continue . . .
```

5. Write a program to calculate the area and perimeter of a rectangle.

IPO:

Input-input a number say l,b,a,p

Process-need an arithmetic operator to calculate area and perimeter

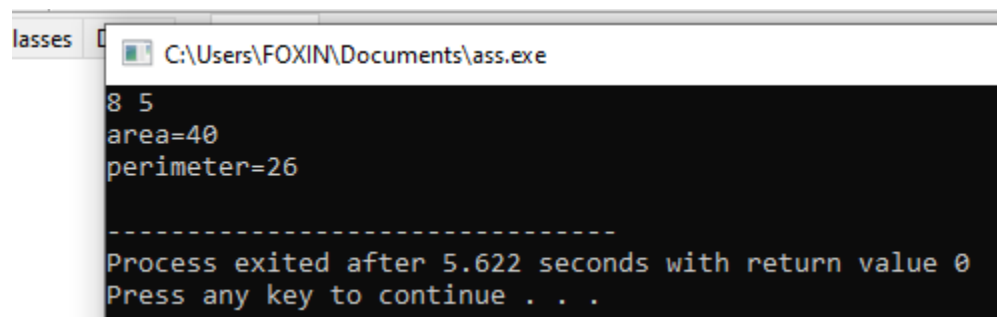
Output-print area and perimeter

Code:

```
#include<stdio.h>

int main()
{
    int len,breadth,area,perimeter, getch;
    scanf("%d%d",&len,&breadth);
    area=len*breadth;
    perimeter=2*(len+breadth);
    printf("area=%d\n",area);
    printf("perimeter=%d\n",perimeter);
    getch;
    return 0;
}
```

Output:



```
lasses C:\Users\FOXIN\Documents\ass.exe
8 5
area=40
perimeter=26
-----
Process exited after 5.622 seconds with return value 0
Press any key to continue . . .
```

6. Write a program to compute the simple interest

IPO:

Input-input a number say p,n,r

Process-calculate $p*n*r/100$

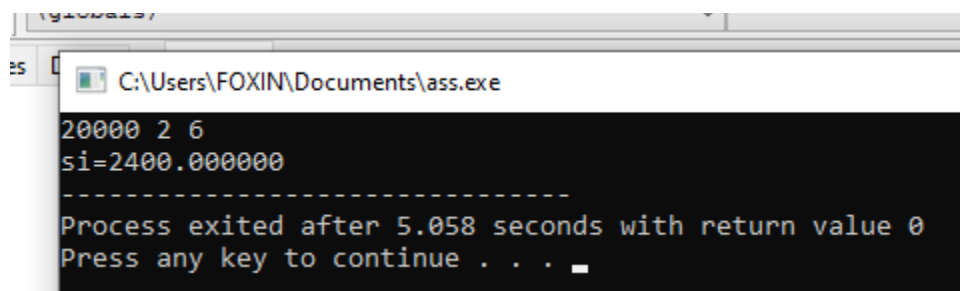
Output-display the simple interest

Code:

```
#include<stdio.h>

int main()
{
    int getch;
    float p,n,r,si;
    scanf("%f%f%f",&p,&n,&r);
    si=p*n*r/100;
    printf("si=%f",si);
    getch;
    return 0;
}
```

Output:



```
20000 2 6
si=2400.000000
-----
Process exited after 5.058 seconds with return value 0
Press any key to continue . . .
```

7. Write a program to convert temperature from Celsius to Fahrenheit

IPO:

Input-input a number say c,f

Process-calculating celcius to fahrenheit

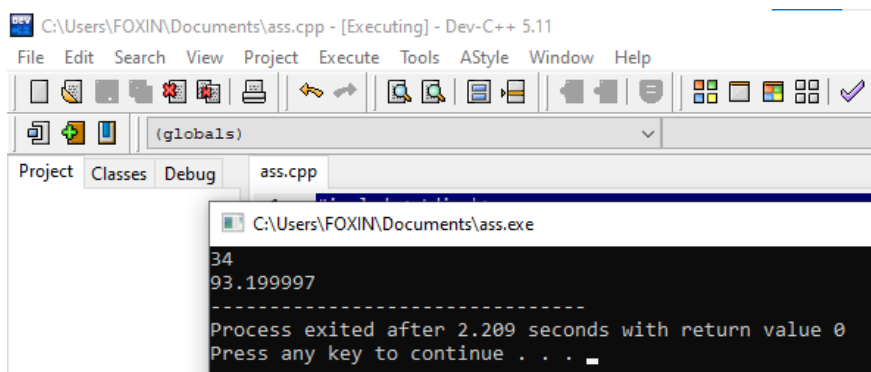
Output-print the temperature

Code:

```
#include<stdio.h>

int main()
{
    int getch;
    float c,f;
    scanf("%f",&c);
    f=(c*9/5)+32;
    printf("%f",f);
    getch;
    return 0;
}
```

Output:



8. Write a program to find the quotient and remainder of two integers.

IPO:

Input-input a number say a,b

Process- $q=a/b$ and $q=a\%b$

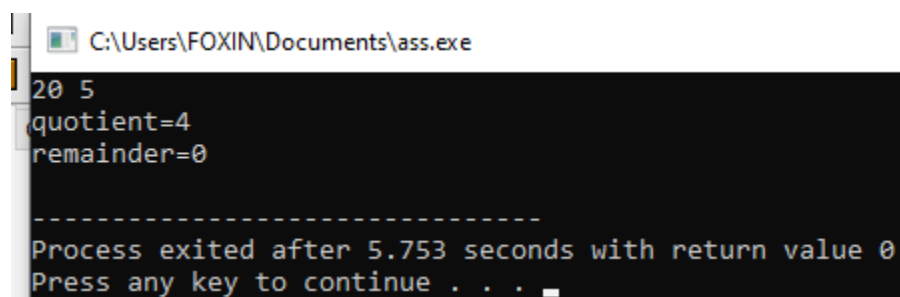
Output-print quotient and remainder

Code:

```
#include<stdio.h>

int main()
{
    int dividend,divisor,quotient,remainder,getch;
    scanf("%d%d",&dividend,&divisor);
    quotient=dividend/divisor;
    remainder=dividend%divisor;
    printf("quotient=%d\n",quotient);
    printf("remainder=%d\n",remainder);
    getch;
    return 0;
}
```

Output:



```
C:\Users\FOXIN\Documents\ass.exe
20 5
quotient=4
remainder=0
-----
Process exited after 5.753 seconds with return value 0
Press any key to continue . . .
```


9. Write a program to check whether a number is even or odd.

IPO:

Input-input a number say a

Process-using if-else statement check even or odd

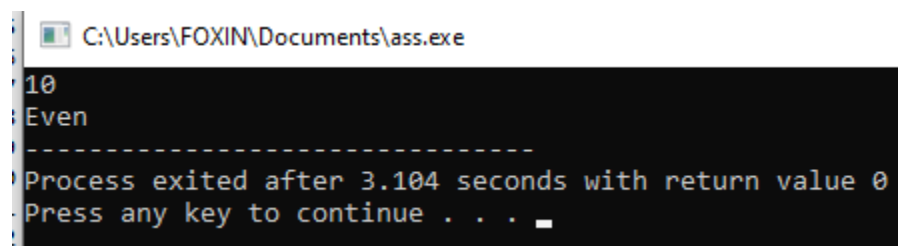
Output-print even or odd

Code:

```
#include<stdio.h>

int main()
{
    int a, getch;
    scanf("%d",&a);
    if(a%2==0)
        printf("Even");
    else
        printf("Odd");
    getch;
    return 0;
}
```

Output:



```
C:\Users\FOXIN\Documents\ass.exe
10
Even
-----
Process exited after 3.104 seconds with return value 0
Press any key to continue . . .
```

10. Write a program to calculate the square and cube of a number.

IPO:

Input-input a number say num

Process-using arithmetic operator, square=num*num, cube=num*num*num

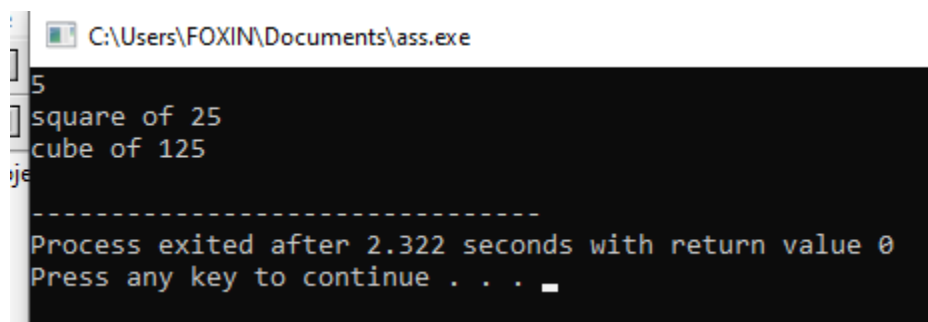
Output-print square and cube

Code:

```
#include<stdio.h>

int main()
{
    int num, getch, square, cube;
    scanf("%d",&num);
    square=num*num;
    cube=num*num*num;
    printf("square of %d\n",square);
    printf("cube of %d\n",cube);
    getch;
    return 0;
}
```

Output:



```
C:\Users\FOXIN\Documents\ass.exe
5
square of 25
cube of 125
-----
Process exited after 2.322 seconds with return value 0
Press any key to continue . . .
```

