

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

```
#include<stdlib.h>
```

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

```
void Add(float a, float b) {
```

```
    float c = a + b;
```

```
    if (a == (int)a && b == (int)b) {
```

```
        printf("Result: %.0f\n", c);
```

```
    }
```

```
    else {
```

```
        printf("Result: %f\n", c);
```

```
    }
```

```
}
```

```
void Subtract(float a, float b) {
```

```
    float c = a - b;
```

```
    if (a == (int)a && b == (int)b) {
```

```
        printf("Result: %.0f\n", c);
```

```
    }
```

```
    else {
```

```
        printf("Result: %f\n", c);
```

```
    }
```

```
}
```

```
void Multiply(float a, float b) {  
    float c = a * b;  
  
    if (a == (int)a && b == (int)b) {  
        printf("Result: %.0f\n", c);  
    }  
    else {  
        printf("Result: %f\n", c);  
    }  
}
```

```
void Divide(float a, float b) {  
    if (b == 0) {  
        printf("Forbidden division by 0, idiot! Try again.\n");  
        return;  
    }  
    float c = a / b;
```

```
    if (a == (int)a && b == (int)b) {  
  
        if ((int)c == c) {  
            printf("Result: %.0f\n", c);  
        }  
        else {  
            printf("Result: %f\n", c);
```

```
    }  
}  
else {  
    printf("Result: %f\n", c);  
}  
}
```

```
int main() {  
    float a, b;  
    char choice;  
  
    printf("Input 2 numbers: ");  
    scanf_s("%f%f", &a, &b);  
  
    printf("What do you want to do?\n");  
    printf("A. Add, B. Subtract, C. Multiply, D. Divide: ");  
    scanf_s(" %c", &choice);  
  
    switch (choice) {  
        case 'A':  
        case 'a':  
            Add(a, b);  
            break;
```

```
case 'B':  
case 'b':  
    Subtract(a, b);  
    break;  
case 'C':  
case 'c':  
    Multiply(a, b);  
    break;  
case 'D':  
case 'd':  
    Divide(a, b);  
    break;  
default:  
    printf("Invalid choice. Try again.\n");  
    break;  
}  
  
return 0;  
}
```