```
#include<iostream>
using namespace std;

int main()
{
    cout<<"introduction aux systèmes embarqués"<<endl;
    system(" pause ");
    return 0;
}</pre>
```

```
#include<iostream>
using namespace std;

int main()
{
    float input;
    cin>>input;

    float angle = ((input-512)*90 / 512);

    cout<<"angle = "<<angle<<endl;

    system(" pause ");
    return 0;
}</pre>
```

```
#include<iostream>
#include<cmath>
using namespace std;
int main()
{
    const float dest_long = 10;
    const float dest_latt = 7;
    float curr_long, curr_latt;
    cin>>curr_long;
    cin>>curr_latt;
    float distance = sqrt( pow(dest_long - curr_long, 2) + pow(dest_latt - curr_latt, 2) );
    cout<<"distance = "<<distance<<endl;
    system(" pause ");
    return 0;
}</pre>
```

```
#include<iostream>
using namespace std;

int main()
{
    float input;
    cin>>input;

    float angle;

    angle = ( (input-512) * 90 / 512);
    short sign = ( (int) angle>>31) & 0x01;
    cout<<"angle = "<<angle<<" : "<<sign<<endl;
    system(" pause ");
    return 0;
}</pre>
```

```
#include<iostream>
using namespace std;

int main()
{
    unsigned char input;
    cin>>input;

    cout<<"act1 = "<< ( (input) & 0x07) <<endl;
    cout<<"act2 = "<< ( (input>>3) & 0x07) <<endl;
    cout<<"act3 = "<< ( (input>>6) & 0x03) <<endl;
    system(" pause ");
    return 0;
}
```

```
#include<iostream>
using namespace std;

int main()
{
    short input=0;
    short act1=6, act2=4, act3=2;
    input = (act1<<5) | (act2<<2) | act3;
    cout<<"byte = "<<input<<endl;
    system(" pause ");
    return 0;
}
```