```c
#include <stdio.h>

int main()
{
    int i,n=6,max=0, a[6]={6,2,-3,1,-4
        ,5};
    max=(max<a[0])?a[0]:0;
    for(i=1;i<n;i++)
    {
        a[0]+=a[i];
        if(a[0]>max)
        {
            max=a[0];
        }
    }
    printf("highest altitude is %d",max
        );
    return 0;
}
```

Arrays

1) write a program to find an unique element in an array. (only one element in array is diff

```
if (a[0] == a[1] = =a[2])
{  i=3;
Method 2  while (a[0] != a[i])
   {
      i++;}
   }
   print("a[i]");
}
else if (a[0]==a[1]!=a[2])
      print (a[2]);
else if (a[0] != a[1] = = a[2])
      print (a[0]);
else
      print(a[1]);
```

Method 2

* sort the array
* then if first 2 element are same then last element is ans.
* if it 2 element are not same the 1st element is ans.

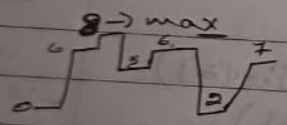
2) create an array of size 5 element read them from user & print.

```
=> #include<stdio.h>
void main()
{
   int i, a[5];
   printf("enter 5 elements");
   for(i=0;i<5;i++)
   {
      scanf("%d", &a[i]);
   }
   printf("the array is");
   for(i=0;i<5;i++)
   {
      printf("%d", a[i]);
   }
}
```

3) Biker altitude problem

⇒ A given array represents the travel of of a biker in an hilly area each consecutive element represents height travelled on consecutive days. (+ means upwards, - downwards).
write a program to calculate the height altitude attained by the biker during his journey.
the starts at see level [0]

a[6] = { 6, 2, -3, 1, -4, 5 }



use a max variable

4) Matching socks

```
for(int i=0; i<N; i++) {
    for(int j=i+1; j<N; j++) {
        if(a[j] < a[i]) {
            int t = a[i];
            a[i] = a[j];
            a[j] = t;
        }
    }
}
```