

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

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

```
int pot(int base, int exp){  
    int res = 1;  
    for (int i = 0; i < exp; i++) res*=base;  
    return res;  
}
```

```
int verif_negpos(double num){  
    if(num > 0) return 1;  
    if(num == 0) return 0;  
    if(num < 0) return -1;  
}
```

```
int perf_sq(int sq){  
    for (int i = 1; i*i <= sq; i++){  
        if((sq/i == i) && (sq%i == 0)) return 1;  
    }  
    return 0;  
}
```

```
double* vet_prod(double *vet_1, double *vet_2){  
    double *vet_res = (double*) malloc(sizeof(double)*10);  
    for(int i = 0; i<10; i++){  
        vet_res[i] = vet_1[i]*vet_2[i];  
    }  
    return vet_res;  
}
```

```
int main() {  
    // teste das funções  
    int potencia = pot(2,5);  
    printf("%d\n", potencia);
```

```
  
    int a = verif_negpos(6);  
    int b = verif_negpos(0);  
    int c = verif_negpos(-8);  
    printf("%d %d %d\n", a, b, c);
```

```
  
    a = perf_sq(169);  
    b = perf_sq(12);  
    printf("%d\n%d\n", a, b);
```

```
  
    double x[10] = {1,2,3,4,5,6,7,8,9,0}, y[10] = {0,9,8,7,6,5,4,3,2,1}, *z = vet_prod(x,y);  
    for(int i = 0; i<10; i++) printf("%lf\n", z[i]);
```

```
  
    return 0;  
}
```