

## 1 exercise 1

```
function abs_value(x,y)
    abs(x-y)
end
```

## 2 exercise 2

1.

```
function sum(u,v)
    n=length(u)
    [u[i] + v[i] for i=1:n]
end
```

2.

```
function sum(u,v)
    [x+y for x=u, y=v]
end
```

## 3 exercise 3

```
function Bakhshali(n)
    N = ifloor(sqrt(n))
    d = n - N^2
    P = d/(2*N)
    A = N+P
    A - P^2/(2*A)
end
```

```
function Babylonian(n,precision)
    x = n/2    #random
    while abs(x^2 - n) > precision
        x = 0.5(x+n/x)
    end
    return x
end
```

