```
% 1.

function sumVectors()

    vect1 = input('please enter first vector: ');
    vect2 = input('please enter second vector: ');

    if length(vect1) ~= length(vect2)
        fprintf('lengths are not the same !!!\n');
        return;
    end

    result = vect1 + vect2;

    fprintf('sum of vectors: \n');
    disp(result);

end
```

```
% 2.


function dot_product = cmptDotProduct(vect1, vect2)

    if length(vect1) ~= length(vect2)
        error('lengths are not the same !!!');
    end


    dot_product = sum(vect1 .* vect2);
end
```

```
% 3.
function euclidean_norm = cmptEuclideanNorm(vect)
    squared_value = vect .^ 2;
    sum_of_square = sum(squared_value);
    euclidean_norm = sqrt(sum_of_square);
end
```

```
% 4.

function cmptCrossProduct()


    vect1 = input('please enter first vector: ');
    vect2 = input('please enter second vector: ');


    if numel(vect1) ~= 3 || numel(vect2) ~= 3
        fprintf('vectors must be three-dimensional! \n');
        return;
    end


    result = [vect1(2)*vect2(3) - vect1(3)*vect2(2);
              vect1(3)*vect2(1) - vect1(1)*vect2(3);
              vect1(1)*vect2(2) - vect1(2)*vect2(1)];


    fprintf('cross product: \n');
    disp(result);

end
```

```
% 5.

function sortedVector = bubbleSort(vect)
    n = length(vect);


    for i = 1:n

        for j = 1:(n-i)

            if vect(j) > vect(j+1)
                temp = vect(j);
                vect(j) = vect(j+1);
                vect(j+1) = temp;
            end
        end
    end


    sortedVector = vect;
end
```