```mathematica
In[65]:=  Euler[a0_, b0_, h0_, f_, alpha_] :=
           Module[{a = N[a0], b = N[b0], h = N[h0], n, x},
             n = (b - a)/h;
             y[0] = alpha;
             For[i = 0, i ≤ n, i++,
             x[i] = a + h*i;
             y[i + 1] = y[i] + h*f[x[i], y[i]];
             Print["Value at x[", i, "]=", x[i], "is ", y[i]];
             ];
             ];
           f[x_, y_] := y*x^3 - 1.5*y;
           Euler[0, 2, 0.5, f, 1]
```

Value at x[0]=0.is 1

Value at x[1]=0.5is 0.25

Value at x[2]=1.is 0.078125

Value at x[3]=1.5is 0.0585938

Value at x[4]=2.is 0.113525

```mathematica
In[68]:=    f[x_, y_] := x^2 + y^2;
            Euler[0, 0.3, 0.1, f, 1]
```

Value at x[0]=0.is 1

Value at x[1]=0.1is 1.1

Value at x[2]=0.2is 1.222

Value at x[3]=0.3is 1.37533

```mathematica
In[70]:=    f[x_, y_] := 3*x + 2*y;
            Euler[0, 0.3, 0.1, f, 1]
```

Value at x[0]=0.is 1

Value at x[1]=0.1is 1.2

Value at x[2]=0.2is 1.47

Value at x[3]=0.3is 1.824

```mathematica
In[74]:=    f[x_, y_] := Log[x + y];
            Euler[1.2, 1.4, 0.2, f, 2]
```

Value at x[0]=1.2is 2

Value at x[1]=1.4is 2.23263