Lista 3 - LP1 - Heanna C. B. Nunes - 2021001 3019

```pascal
1- program ex1;
var
   N: array[1...20] of integer;
   i,j,x : integer;
begin
   for i := 1 to 20 do
   begin
      readln(N[i]);
      write(N[i], '');
   end;
   x := 0;
   for i := 1 to 19 do
   begin
      for j := i+1 to 20 do
      begin
      if (N[i] < N[j]) then
         x := (N[i]);
      end;
   end;
   writeln('O menor elemento de
   N eh, x, e sua posição dentro
   do vetor eh', i);
end.
```

```pascal
2- program ex2;
var
   K: array[1...30] of integer;
   i,j, aux: integer;
begin
   for i := 1 to 30 do
   begin
      readln(K[i]);
      write(K[i], '');
   end;
   for i := 1 to 29 do
   begin
      for j := i+1 to 30 do
      begin
      if (i mod 2) = 1 then
      aux := K[i];
      K[i] := K[i+1];
      K[i+1] := aux;
      end;
   end;
   write(K[i], '');
end.
```

```pascal
3-program ex3;
var
  S: array [1...20] of integer;
  i, A: integer;
begin
  for i := 1 to 20 do
  begin
    readln(S[i]);
    write(S[i], ' ');
  end;
  for i := 1 to 20 do
  begin
    S[i] := S[i] * A;
    write(S[i], ' ');
  end;
end.
```

```pascal
4-program ex 4;
var
  A: array [1...20] of integer;
  i, x: integer;
begin
  x := 0;
  for i := 1 to 20 do
  begin
    readln(A[i]);
    if (A[i] mod 2) = 0 then
      x := x + 1;
  end;
  writeln(x);
end.
```

```pascal
5-program ex 5;
var
  A: array [1...100] of integer;
  i, j, aux: integer;
begin
  for i := 1 to 100 do
  begin
    readln(A[i]);
  end;
  for i := 1 to 99 do
  begin
    for j := i+1 to 100 do
    begin
      if A[i] < A[j] then
      begin
        aux := A[i];
        A[i] := A[j];
        A[j] := aux;
      end;
    end;
  end;
  write(A[i], ' ');
end.
```

```pascal
6- program ex 6;
var
    X: array [1...100] of integer;
n, x, i, j: integer;
    begin
    for i:=1 to 100 do
    begin
    x:=0;
    repeat
    n:=0;
    for j:=101 to 300 do
    begin
    if (300 mod j =0) then
    x:=x+1;
    end;
    if (x=2) then
    begin
        X[i]:=j;
    n:=n+1;
    end;
    until (n=30);
    end;
    readln (X[i]);
        write (X[i],'');
end.
```

```pascal
7- program ex 7;
var
    K, P: array [1..15] of integer;
x, i, j, m: integer;
begin
x:=0;
    readln (K[i]);
    for i:=n to 1 do
    begin
    if (K[i] mod n =0) then
    begin
    x:=x+1;
    if (x=2) then
    P[j]:=K[i];
    end;
    write(P[j], ¹¹);
end
```

```pascal
8- program ex 8;
var
    X: array [1..20] of integer;
i, j, x, n: integer;
begin
readln (X[i]);
for i:=1 to 19 do
n:=0;
begin
for j:=i+1 to 20 do
begin
n:=0;
if (A[i] ≠ A[j]) then
X:=A[i];
if (A[i]=A[j]) and (A[i]=X) then
n:=n+1;
end;
end;
writeln ('Valoi', x, 'apareci', n, 'veyes').
end. n:=n+1;
```

```pascal
9 - program ex 9;
var
  A: array [1..50] of integer;
  aux, i, j: integer;
begin
  readln (A[i]);
  writeln ('Digite o codigo');
  readln (c);
  if (c = 1) then
  write (A[i], ' ');
  if (c = 2) then
  begin
  for i := 1 to 49 do
  begin
  for j := 50 to i+1 do
  begin
  aux := A[i];
  A[i] := A[j];
  A[j] := aux;
  end;
  end;
  for i:1 to 50 do
  write (A[i], ' ');
  end;
  if (c = 0) then
  writeln ('Fim do programa');
end.
```

```pascal
10 - program ex 10;
var
  A: array [1...10] of integer;
  n, x, i, j: integer;
begin
  readln (A[i]);
  repeat
  for i := 1 to 9 do
  n := 0;
  begin
  for j := i+1 to 10 do
  begin
  if (A[i] < A[j]) then
  x := A[i];
  writeln (x, ' ');
  n := n+1;
  end;
  end;
  until (n = 3);
end.
```

```pascal
11- program ex 11;
var
A,B: array [1..10] of real;
i,j,c, fat: integer;
begin
  readln (A[i]);
  for j:= 1 to 10 do
  begin
    if (A[i] > 0) then
    begin
      fat := 1; e := 1;
      repeat
      fat := (fat * e);
      e := e + 1;
      until (e = A[i]);
      end;
    B[j] := fat
    else
    B[j] := A[i];
    end;
  write (B[j] : 8:1, '');
end.
```

```pascal
12- program ex 12;
var
A: array [1..10] of integer;
i,j, aux: integer;
begin
  readln (A[i]);
  for i:= 1 to 9 do
  begin
                10      i+1
    for j:=       to        do
    begin
      aux := A[i];
      A[i] := A[j];
      A[j] := aux;
    end;
  end;
  write (A[i], '');
end.
```