P5

```
procedure GREEDY
    Set X = ∅;
    repeat
        Select the best element e ∈ S;
        S := S\{e};
        if (X ∪ e is a feasible partial solution) then
            add e to the partial solution X;
        end if
    until S = ∅ or X is completed
    return X;
end procedure
```

We have to define

- Structure of the solution and the elements belonging to it
- Criterion according to which the best element is chosen
- Feasibility check

BFD - Best Fit Decreasing

1) Open 1st machine
2) Pick request with the highest "Occupancy"
3) Assign the request to the machine with the minimal residual capacity

$$Occupancy\_1[i] = \frac{w_i}{B_c} + \frac{cpu_i}{B\_CPU} + \frac{m_i}{B\_m}$$

or

$$Occupancy\_2[i] = \frac{w_i}{Res[B_c]} + \frac{cpu_i}{Res[B\_CPU]} + \frac{m_i}{Res[B\_mi]}$$

↳ to be updated after each request assignment ;;

$$Residual\_B = \left[\frac{Res\_B_c[i]}{B_c} + \frac{Res\_B\_CPU[j]}{B\_CPU} + \frac{Res\_B\_ms}{B\_m}\right] / 3$$

1 : j ;; empty
0 : j ;; full