**Experiment : 1**

Enter the area : 15

Enter the money you have : 30000

Enter the number of crops you have : 6

Enter crop name : Barley

Enter crop name : Maize

Enter crop name : Arhar

Enter crop name : Moong

Enter crop name : Bajra

Enter crop name : Jowar

Initial population is :

[2, 2, 2, 0, 7, 2] with fitness 198.60378478121476

[1, 2, 7, 0, 1, 4] with fitness 333.90333825812183

[1, 3, 0, 0, 9, 2] with fitness 186.17107854917901

[0, 0, 0, 7, 3, 5] with fitness 547.9725869449978

[7, 0, 0, 1, 2, 5] with fitness 330.42795735794675

[3, 1, 2, 3, 6, 0] with fitness 193.97394383004192

[1, 2, 4, 5, 0, 3] with fitness 415.48879260104724

[1, 6, 5, 1, 0, 2] with fitness 246.33384230615778

[2, 0, 3, 4, 3, 3] with fitness 377.7224508251447

[0, 8, 1, 6, 0, 0] with fitness 274.39736173647333

[2, 7, 5, 0, 1, 0] with fitness 116.2279149253086

[1, 1, 5, 2, 5, 1] with fitness 243.28513568935858

[1, 1, 6, 0, 7, 0] with fitness 144.63713416322457

[1, 1, 4, 6, 2, 1] with fitness 356.0104586905974

[4, 3, 4, 0, 2, 2] with fitness 200.5573055730503

[1, 4, 0, 5, 5, 0] with fitness 241.81029032984895

[9, 1, 5, 0, 0, 0] with fitness 94.66632053668938

[0, 9, 0, 0, 5, 1] with fitness 129.86209595717202

[1, 4, 2, 2, 5, 1] with fitness 212.8017509579633

[1, 0, 4, 3, 7, 0] with fitness 222.30639527484362

[0, 7, 4, 0, 2, 2] with fitness 211.39842511818176

[2, 2, 4, 0, 1, 6] with fitness 398.0311171199105

[2, 2, 1, 1, 4, 5] with fitness 359.31975540243775

[4, 0, 5, 0, 6, 0] with fitness 123.75553107593842

[7, 4, 1, 1, 1, 1] with fitness 143.35656345817253

[2, 4, 1, 4, 3, 1] with fitness 260.07875085808104

[9, 1, 3, 0, 0, 2] with fitness 171.6655075285593

[2, 7, 2, 4, 0, 0] with fitness 213.81025180822874

[0, 0, 8, 5, 2, 0] with fitness 318.04069061260196

[1, 0, 0, 0, 6, 8] with fitness 470.36650343366193

[1, 2, 2, 6, 0, 4] with fitness 476.4910970529224

[0, 0, 5, 3, 5, 2] with fitness 327.31997651511347

[0, 0, 2, 2, 3, 8] with fitness 550.9578126531017

[1, 0, 1, 4, 3, 6] with fitness 506.09263944303086

[0, 3, 1, 1, 2, 8] with fitness 505.54321002492543

[3, 0, 8, 1, 2, 1] with fitness 227.91521589453214

[0, 0, 6, 4, 2, 3] with fitness 411.0367601444666

[0, 8, 2, 1, 2, 2] with fitness 223.74000783032358

[1, 0, 0, 6, 4, 4] with fitness 466.527381303882

[0, 3, 2, 0, 3, 7] with fitness 436.9694125138909

[1, 1, 5, 2, 4, 2] with fitness 289.35622224445285

[1, 2, 5, 2, 2, 3] with fitness 332.837673614908

[0, 6, 1, 1, 5, 2] with fitness 221.34778514044248

[1, 5, 3, 3, 3, 0] with fitness 201.78672629248877

[1, 2, 3, 2, 4, 3] with fitness 317.6946874965894

[5, 5, 1, 0, 4, 0] with fitness 75.22146784518361

[3, 0, 7, 1, 4, 0] with fitness 174.27263628027856

[0, 1, 1, 8, 4, 1] with fitness 398.74430261424044

[2, 8, 1, 0, 3, 1] with fitness 129.4233940591265

[1, 6, 3, 0, 1, 4] with fitness 293.2588252829281

[1, 1, 1, 2, 6, 4] with fitness 351.21242311800415

[1, 0, 1, 1, 8, 4] with fitness 323.7278542875437

[2, 0, 3, 2, 3, 5] with fitness 409.71621590513416

[2, 2, 0, 1, 5, 5] with fitness 351.74826234327844

[1, 0, 0, 6, 8, 0] with fitness 282.24303508350494

[5, 3, 2, 2, 3, 0] with fitness 148.1206393038202

[0, 0, 3, 3, 0, 9] with fitness 634.6745962824548

[0, 4, 0, 3, 2, 6] with fitness 463.38831670113757

[1, 2, 5, 6, 1, 0] with fitness 314.9212300100233

[3, 1, 0, 8, 1, 2] with fitness 421.34415089740946

[1, 1, 1, 6, 1, 5] with fitness 517.5803257334965

[1, 2, 7, 0, 0, 5] with fitness 379.9744248132161

[2, 5, 2, 0, 2, 4] with fitness 282.97705233748593

[1, 2, 3, 3, 4, 2] with fitness 301.6978049565946

[0, 3, 6, 5, 1, 0] with fitness 295.1287989403659

[6, 5, 0, 3, 1, 0] with fitness 152.57267176040088

[4, 0, 0, 1, 5, 5] with fitness 346.3277025707127

[0, 0, 1, 6, 4, 4] with fitness 479.3987894339633

[0, 2, 3, 8, 2, 0] with fitness 365.2265669928257

[7, 1, 1, 5, 1, 0] with fitness 225.3511985173937

[2, 1, 4, 1, 1, 6] with fitness 430.6949563196491

[3, 6, 1, 0, 2, 3] with fitness 221.4449224676713

[0, 5, 0, 2, 2, 6] with fitness 430.7244775013989

[0, 6, 0, 0, 9, 0] with fitness 91.55991495599511

[3, 7, 2, 1, 2, 0] with fitness 118.28772469200818

[1, 7, 3, 3, 1, 0] with fitness 196.60745592321055

[4, 0, 0, 4, 4, 3] with fitness 344.40814150582275

[1, 0, 4, 5, 2, 3] with fitness 420.6680629703255

[0, 0, 0, 4, 2, 9] with fitness 642.0343211200764

[3, 6, 1, 1, 4, 0] with fitness 113.30586681748798

[2, 2, 1, 8, 0, 2] with fitness 431.62592384285165

[6, 5, 1, 0, 2, 1] with fitness 115.99263932935588

[1, 0, 0, 1, 8, 5] with fitness 362.2274477834786

[2, 4, 3, 1, 2, 3] with fitness 277.14129804128964

[1, 0, 0, 7, 4, 3] with fitness 450.53049876388724

[5, 5, 0, 1, 2, 2] with fitness 189.86635191131234

[4, 0, 1, 1, 7, 2] with fitness 215.68593596458922

[3, 1, 7, 1, 0, 3] with fitness 309.89626076092225

[4, 2, 3, 1, 3, 2] with fitness 225.64965171362962

[1, 9, 2, 0, 0, 3] with fitness 231.84734011475723

[2, 0, 2, 3, 2, 6] with fitness 478.2900134161687

[2, 2, 1, 3, 6, 1] with fitness 235.18381721225973

[1, 5, 0, 0, 1, 8] with fitness 457.4183275104664

[8, 3, 0, 0, 1, 3] with fitness 195.14275960781936

[1, 2, 0, 4, 8, 0] with fitness 216.9153566840277

[4, 1, 5, 2, 1, 2] with fitness 273.4564770316869

[5, 6, 1, 0, 1, 2] with fitness 164.77400577073303

[0, 4, 3, 5, 2, 1] with fitness 315.89577113334315

[1, 1, 9, 4, 0, 0] with fitness 287.64842940110066

[1, 2, 1, 1, 5, 5] with fitness 364.61967047335975

Average fitness of population in generation 1 is 301.6039615068044 .

Average fitness of population in generation 2 is 307.8283133594309 .

Average fitness of population in generation 3 is 305.53953607502734 .

Average fitness of population in generation 4 is 311.8435797828538 .

Average fitness of population in generation 5 is 316.97098288062557 .

Average fitness of population in generation 6 is 320.69650638120316 .

Average fitness of population in generation 7 is 326.9158552764249 .

Average fitness of population in generation 8 is 335.8595349633443 .

Average fitness of population in generation 9 is 341.51709422980696 .

Average fitness of population in generation 10 is 349.3773538797448 .

Average fitness of population in generation 11 is 353.58992345176216 .

Average fitness of population in generation 12 is 359.1576142434604 .

Average fitness of population in generation 13 is 366.4800687118162 .

Average fitness of population in generation 14 is 372.1724028162826 .

Average fitness of population in generation 15 is 376.0265149209625 .

Average fitness of population in generation 16 is 379.3592449702412 .

Average fitness of population in generation 17 is 385.4065912418595 .

Average fitness of population in generation 18 is 385.000717750037 .

Average fitness of population in generation 19 is 387.9476178352814 .

Average fitness of population in generation 20 is 393.2983089914092 .

Average fitness of population in generation 21 is 397.2302580055124 .

Average fitness of population in generation 22 is 402.96691115160843 .

Average fitness of population in generation 23 is 407.68677754553806 .

Average fitness of population in generation 24 is 415.7220735784604 .

Average fitness of population in generation 25 is 421.4458480326696 .

Average fitness of population in generation 26 is 428.08780342298616 .

Average fitness of population in generation 27 is 435.177204098387 .

Average fitness of population in generation 28 is 438.00083055646587 .

Average fitness of population in generation 29 is 438.77350193285054 .

Average fitness of population in generation 30 is 443.1198095629472 .

Average fitness of population in generation 31 is 448.2268210374117 .

Average fitness of population in generation 32 is 451.9279829205202 .

Average fitness of population in generation 33 is 451.7477870999655 .

Average fitness of population in generation 34 is 452.88953554480247 .

Average fitness of population in generation 35 is 447.57386074910784 .

Average fitness of population in generation 36 is 455.16396323540323 .

Average fitness of population in generation 37 is 456.71911611785174 .

Average fitness of population in generation 38 is 466.09269817191097 .

Average fitness of population in generation 39 is 466.1165552392272 .

Average fitness of population in generation 40 is 462.47191268568963 .

Average fitness of population in generation 41 is 467.9544279226508 .

Average fitness of population in generation 42 is 469.95171731668904 .

Average fitness of population in generation 43 is 465.34928493377845 .

Average fitness of population in generation 44 is 471.5962691470929 .

Average fitness of population in generation 45 is 475.2204766523788 .

Average fitness of population in generation 46 is 476.3497431260384 .

Average fitness of population in generation 47 is 476.28383366942455 .

Average fitness of population in generation 48 is 481.7017914470424 .

Average fitness of population in generation 49 is 486.461506369098 .

Average fitness of population in generation 50 is 496.78376702007654 .

Average fitness of population in generation 51 is 500.5737425005256 .

Average fitness of population in generation 52 is 509.31313075080345 .

Average fitness of population in generation 53 is 508.84359613394804 .

Average fitness of population in generation 54 is 508.6166973503898 .

Average fitness of population in generation 55 is 511.78123036269375 .

Average fitness of population in generation 56 is 514.8363442460759 .

Average fitness of population in generation 57 is 518.040448805415 .

Average fitness of population in generation 58 is 514.0000486112389 .

Average fitness of population in generation 59 is 520.613547373925 .

Average fitness of population in generation 60 is 528.953021406444 .

Average fitness of population in generation 61 is 534.5713616356044 .

Average fitness of population in generation 62 is 542.5866311991609 .

Average fitness of population in generation 63 is 548.1676078097346 .

Average fitness of population in generation 64 is 557.9586493173165 .

Average fitness of population in generation 65 is 564.5293707249033 .

Average fitness of population in generation 66 is 567.3207469938961 .

Average fitness of population in generation 67 is 573.7513871857652 .

Average fitness of population in generation 68 is 581.4545452046175 .

Average fitness of population in generation 69 is 589.4815246702184 .

Average fitness of population in generation 70 is 595.8266825307529 .

Average fitness of population in generation 71 is 596.7039191433566 .

Average fitness of population in generation 72 is 603.2552859367877 .

Average fitness of population in generation 73 is 609.0313826746151 .

Average fitness of population in generation 74 is 617.3719483661814 .

Average fitness of population in generation 75 is 623.1566050972276 .

Average fitness of population in generation 76 is 628.3551925493426 .

Average fitness of population in generation 77 is 633.8987365597131 .

Average fitness of population in generation 78 is 635.81174149039 .

Average fitness of population in generation 79 is 636.2819939772476 .

Average fitness of population in generation 80 is 640.1792682199699 .

Average fitness of population in generation 81 is 645.0094598811822 .

Average fitness of population in generation 82 is 647.2013908178756 .

Average fitness of population in generation 83 is 655.7237538662827 .

Average fitness of population in generation 84 is 661.8548192709886 .

Average fitness of population in generation 85 is 663.6632799848203 .

Average fitness of population in generation 86 is 670.3267469601218 .

Average fitness of population in generation 87 is 674.5807679354122 .

Average fitness of population in generation 88 is 672.6234029698229 .

Average fitness of population in generation 89 is 677.3043215611387 .

Average fitness of population in generation 90 is 679.5157853783027 .

Average fitness of population in generation 91 is 687.4187059308708 .

Average fitness of population in generation 92 is 689.9409840445107 .

Average fitness of population in generation 93 is 689.8465039113797 .

Average fitness of population in generation 94 is 696.84481924027 .

Average fitness of population in generation 95 is 703.3249827141096 .

Average fitness of population in generation 96 is 704.6593414390244 .

Average fitness of population in generation 97 is 709.2061379284002 .

Average fitness of population in generation 98 is 714.117648580845 .

Average fitness of population in generation 99 is 717.9907389961164 .

Average fitness of population in generation 100 is 721.4195911401184 .

Average fitness of population in generation 101 is 727.6930666996585 .

Average fitness of population in generation 102 is 737.1749293139931 .

Average fitness of population in generation 103 is 735.7617877265865 .

Average fitness of population in generation 104 is 739.5244493965148 .

Average fitness of population in generation 105 is 741.9187180197788 .

Average fitness of population in generation 106 is 740.4778491738232 .

Average fitness of population in generation 107 is 742.202657030382 .

Average fitness of population in generation 108 is 748.0893374560578 .

Average fitness of population in generation 109 is 743.6417769369323 .

Average fitness of population in generation 110 is 750.6666210993081 .

Average fitness of population in generation 111 is 758.4586754194308 .

Average fitness of population in generation 112 is 765.2872322015647 .

Average fitness of population in generation 113 is 763.2000067704029 .

Average fitness of population in generation 114 is 764.6009722265396 .

Average fitness of population in generation 115 is 769.7575461673749 .

Average fitness of population in generation 116 is 771.9119904842769 .

Average fitness of population in generation 117 is 779.4239323252757 .

Average fitness of population in generation 118 is 786.5967959460609 .

Average fitness of population in generation 119 is 791.4930276990631 .

Average fitness of population in generation 120 is 795.9716559047469 .

Answer is : [0, 0, 8, 5, 2, 7] with fitness 690.5172353280491 .

The genetic algorithm suggests that you should plant :-

Barley in 0 hectares of your farm.

Maize in 0 hectares of your farm.

Arhar in 8 hectares of your farm.

Moong in 5 hectares of your farm.

Bajra in 2 hectares of your farm.

Jowar in 7 hectares of your farm.

 

