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| OSP | 2014 |

1. No.26

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| Kode Program Dalam Soal: |
| var  i, j, total : integer;  begin  total := 0;  for i := 1 to 100 do  for j := 1 to 100 do  total := total + i - j;  writeln(total);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  i, j, total : integer;  begin  total := 0;  for i := 1 to 100 do  begin  writeln('i= ',i);  total := total + i  end;  writeln('');  for j := 1 to 100 do  begin  writeln('j= ',j);  total := total + j;  total:=total-total  end;  writeln('');  writeln('Hasil Output Total= ',total);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| i= 1 i= 2 i= 3 i= 4 i= 5 i= 6 i= 7  i= 8 i= 9 i= 10 i= 11 i= 12 i= 13 i= 14  i= 15 i= 16 i= 17 i= 18 i= 19 i= 20 i= 21  i= 22 i= 23 i= 24 i= 25 i= 26 i= 27 i= 28  i= 29 i= 30 i= 31 i= 32 i= 33 i= 34 i= 35  i= 36 i= 37 i= 38 i= 39 i= 40 i= 41 i= 42  i= 43 i= 44 i= 45 i= 46 i= 47 i= 48 i= 49  i= 50 i= 51 i= 52 i= 53 i= 54 i= 55 i= 56  i= 57 i= 58 i= 59 i= 60 i= 61 i= 62 i= 63 i= 64 i= 65 i= 66 i= 67 i= 68 i= 69 i= 70  i= 71 i= 72 i= 73 i= 74 i= 75 i= 76 i= 77 i= 78 i= 79 i= 80 i= 81 i= 82 i= 83 i= 84 i= 85 i= 86 i= 87 i= 88 i= 89 i= 90 i= 91  i= 92 i= 93 i= 94 i= 95 i= 96 i= 97 i= 98 i= 99 i= 100  j= 1 j= 2 j= 3 j= 4 j= 5 j= 6 j= 7 j= 8 j= 9 j= 10 j= 11 j= 12 j= 13 j= 14 j= 15 j= 16 j= 17 j= 18 j= 19 j= 20 j= 21 j= 22 j= 23 j= 24 j= 25 j= 26 j= 27 j= 28 j= 29 j= 30 j= 31 j= 32 j= 33 j= 34 j= 35 j= 36 j= 37 j= 38 j= 39 j= 40 j= 41 j= 42 j= 43 j= 44 j= 45 j= 46 j= 47 j= 48 j= 49 j= 50 j= 51 j= 52 j= 53 j= 54 j= 55 j= 56 j= 57 j= 58 j= 59 j= 60 j= 61 j= 62 j= 63 j= 64 j= 65 j= 66 j= 67 j= 68 j= 69 j= 70 j= 71 j= 72 j= 73 j= 74 j= 75 j= 76 j= 77 j= 78 j= 79 j= 80 j= 81 j= 82 j= 83 j= 84 j= 85 j= 86 j= 87 j= 88 j= 89 j= 90 j= 91 j= 92 j= 93 j= 94 j= 95 j= 96 j= 97 j= 98 j= 99 j= 100  Hasil Output Total= 0 |

1. No.27

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| Kode Program Dalam Soal: |
| function cimi(x,y:integer):integer;  begin  if (x + y = 0) then begin  cimi := 0;  end else if (x > y) then begin  cimi := y + cimi(x-1,y);  end else begin  cimi := x + cimi(x,y-1);  end;  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a : integer;  function cimi(x,y :integer):integer;  begin  if (x + y = 0) then begin  cimi := 0;  writeln('if (x + y = 0) then');  writeln('cimi := 0;');  writeln(cimi);  end  else if (x > y) then begin  cimi := y + cimi(x-1,y);  writeln('if (x > y)');  writeln('then cimi := y + cimi(x-1,y)');  writeln(cimi);  end else begin  cimi := x + cimi(x,y-1);  writeln('cimi := x + cimi(x,y-1)');  writeln(cimi);  end;  end;  begin  a := cimi(5,7);  write('jadi nilai dari cimi(5,7)= ',a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| if (x + y = 0) then  cimi := 0;  0  if (x > y)  then cimi := y + cimi(x-1,y)  0  cimi := x + cimi(x,y-1)  1  if (x > y)  then cimi := y + cimi(x-1,y)  2  cimi := x + cimi(x,y-1)  4  if (x > y)  then cimi := y + cimi(x-1,y)  6  cimi := x + cimi(x,y-1)  9  if (x > y)  then cimi := y + cimi(x-1,y)  12  cimi := x + cimi(x,y-1)  16  if (x > y)  then cimi := y + cimi(x-1,y)  20  cimi := x + cimi(x,y-1)  25  cimi := x + cimi(x,y-1)  30  cimi := x + cimi(x,y-1)  35    jadi nilai dari cimi(5,7)= 35 |

1. No.28

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| Kode Program Dalam Soal: |
| function cimi(x,y:integer):integer;  begin  if (x + y = 0) then begin  cimi := 0;  end else if (x > y) then begin  cimi := y + cimi(x-1,y);  end else begin  cimi := x + cimi(x,y-1);  end;  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a : integer;  function cimi(x,y :integer):integer;  begin  if (x + y = 0) then begin  cimi := 0;  writeln('if (x + y = 0) then');  writeln('cimi := 0;');  writeln(cimi);  end  else if (x > y) then begin  cimi := y + cimi(x-1,y);  writeln('if (x > y)');  writeln('then cimi := y + cimi(x-1,y)');  writeln(cimi);  end else begin  cimi := x + cimi(x,y-1);  writeln('cimi := x + cimi(x,y-1)');  writeln(cimi);  end;  end;  begin  a := cimi(29,13);  write('jadi nilai dari cimi(29,13)= ',a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| if (x + y = 0) then  cimi := 0;  0  if (x > y)  then cimi := y + cimi(x-1,y)  0  cimi := x + cimi(x,y-1)  1  if (x > y)  then cimi := y + cimi(x-1,y)  2  cimi := x + cimi(x,y-1)  4  if (x > y)  then cimi := y + cimi(x-1,y)  6  cimi := x + cimi(x,y-1)  9  if (x > y)  then cimi := y + cimi(x-1,y)  12  cimi := x + cimi(x,y-1)  16  if (x > y)  then cimi := y + cimi(x-1,y)  20  cimi := x + cimi(x,y-1)  25  if (x > y)  then cimi := y + cimi(x-1,y)  30  cimi := x + cimi(x,y-1)  36  if (x > y)  then cimi := y + cimi(x-1,y)  42  cimi := x + cimi(x,y-1)  49  if (x > y)  then cimi := y + cimi(x-1,y)  56  cimi := x + cimi(x,y-1)  64  if (x > y)  then cimi := y + cimi(x-1,y)  72  cimi := x + cimi(x,y-1)  81  if (x > y)  then cimi := y + cimi(x-1,y)  90  cimi := x + cimi(x,y-1)  100  if (x > y)  then cimi := y + cimi(x-1,y)  110  cimi := x + cimi(x,y-1)  121  if (x > y)  then cimi := y + cimi(x-1,y)  132  cimi := x + cimi(x,y-1)  144  if (x > y)  then cimi := y + cimi(x-1,y)  156  cimi := x + cimi(x,y-1)  169  if (x > y)  then cimi := y + cimi(x-1,y)  182  if (x > y)  then cimi := y + cimi(x-1,y)  195  if (x > y)  then cimi := y + cimi(x-1,y)  208  if (x > y)  then cimi := y + cimi(x-1,y)  221  if (x > y)  then cimi := y + cimi(x-1,y)  234  if (x > y)  then cimi := y + cimi(x-1,y)  247  if (x > y)  then cimi := y + cimi(x-1,y)  260  if (x > y)  then cimi := y + cimi(x-1,y)  273  if (x > y)  then cimi := y + cimi(x-1,y)  286  if (x > y)  then cimi := y + cimi(x-1,y)  299  if (x > y)  then cimi := y + cimi(x-1,y)  312  if (x > y)  then cimi := y + cimi(x-1,y)  325  if (x > y)  then cimi := y + cimi(x-1,y)  338  if (x > y)  then cimi := y + cimi(x-1,y)  351  if (x > y)  then cimi := y + cimi(x-1,y)  364  if (x > y)  then cimi := y + cimi(x-1,y)  377  jadi nilai dari cimi(29,13)= 377 |

1. No.29

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| Kode Program Dalam Soal: |
| function blossom(x : integer) : integer;  var  ans,i : integer;  begin  ans := 0;  for i := 1 to x do begin  ans := ans + i;  end;  blossom := ans;  end;  function bubble(x : integer) : integer;  var  ans,i : integer;  begin  ans := 0;  for i := 1 to x do begin  ans := ans + blossom(i);  end;  bubble := ans;  end;  function buttercup(x : integer) : integer;  var  ans,i : integer;  begin  ans := 0;  for i := 1 to x do begin  ans := ans + bubble(i);  end;  buttercup := ans;  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a : integer;  function blossom(x : integer) : integer;  var  ans,i : integer;  begin  writeln('masuk ke fungsi blossom');  ans := 0;  for i := 1 to x do  begin  writeln('ans=',ans,' + ',i,' = ');  ans := ans + i;  writeln(ans);  inc(i);  end;  blossom := ans;  writeln('blossom = ',blossom);  end;  function bubble(x : integer) : integer  var  ans,i : integer;  begin  writeln('masuk ke function bubble');  ans := 0;  for i := 1 to x do begin  writeln('ans := ',ans,' + blossom(',i,') ');  ans:= ans + blossom(i);  writeln('ans = ',ans);  inc(i);  end;  bubble := ans;  writeln('bubble = ',bubble);  end;  function buttercup(x : integer) : integer;  var  ans,i : integer;  begin  writeln('Masuk ke function buttercup');  ans := 0;  i := 1;  for i := 1 to x do begin  writeln('ans:= ',ans,' + bubble(',i,')');  ans := ans + bubble(i);  writeln('ans =',ans);  inc(i)  end;  buttercup := ans;  writeln('buttercup = ',buttercup);  end ;  begin  a := buttercup(3);  write(a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| Masuk ke function buttercup  ans:= 0 + bubble(1)  masuk ke function bubble  ans := 0 + blossom(1)  masuk ke fungsi blossom  ans=0 + 1 =  1  blossom = 1  ans = 1  bubble = 1  ans =1  ans:= 1 + bubble(3)  masuk ke function bubble  ans := 0 + blossom(1)  masuk ke fungsi blossom  ans=0 + 1 =  1  blossom = 1  ans = 1  ans := 1 + blossom(3)  masuk ke fungsi blossom  ans=0 + 1 =  1  ans=1 + 3 =  4  blossom = 4  ans = 5  bubble = 5  ans =6  buttercup = 6  6  Jadi nilai dari buutercup(3) adalah 6 |

1. No.30

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| Kode Program Dalam Soal: |
| function blossom(x : integer) : integer;  var  ans,i : integer;  begin  ans := 0;  for i := 1 to x do begin  ans := ans + i;  end;  blossom := ans;  end;  function bubble(x : integer) : integer;  var  ans,i : integer;  begin  ans := 0;  for i := 1 to x do begin  ans := ans + blossom(i);  end;  bubble := ans;  end;  function buttercup(x : integer) : integer;  var  ans,i : integer;  begin  ans := 0;  for i := 1 to x do begin  ans := ans + bubble(i);  end;  buttercup := ans;  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a : integer;  function blossom(x : integer) : integer;  var  ans,i : integer;  begin  writeln('masuk ke fungsi blossom');  ans := 0;  for i := 1 to x do  begin  writeln('ans=',ans,' + ',i,' = ');  ans := ans + i;  writeln(ans);  inc(i);  end;  blossom := ans;  writeln('blossom = ',blossom);  end;  function bubble(x : integer) : integer  var  ans,i : integer;  begin  writeln('masuk ke function bubble');  ans := 0;  for i := 1 to x do begin  writeln('ans := ',ans,' + blossom(',i,') ');  ans:= ans + blossom(i);  writeln('ans = ',ans);  inc(i);  end;  bubble := ans;  writeln('bubble = ',bubble);  end;  function buttercup(x : integer) : integer;  var  ans,i : integer;  begin  writeln('Masuk ke function buttercup');  ans := 0;  i := 1;  for i := 1 to x do begin  writeln('ans:= ',ans,' + bubble(',i,')');  ans := ans + bubble(i);  writeln('ans =',ans);  inc(i)  end;  buttercup := ans;  writeln('buttercup = ',buttercup);  end ;  begin  a := buttercup(6);  write(a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| blossom = 1  nilai bubble = 1  blossom = 1  blossom = 3  nilai bubble = 4  blossom = 1  blossom = 3  blossom = 6  nilai bubble = 10  blossom = 1  blossom = 3  blossom = 6  blossom = 10  nilai bubble = 20  blossom = 1  blossom = 3  blossom = 6  blossom = 10  blossom = 15  nilai bubble = 35  blossom = 1  blossom = 3  blossom = 6  blossom = 10  blossom = 15  blossom = 21  nilai bubble = 56  jumlah semua buttercup adalah= 126 makabuttercup =126  Jadi nilai dari buutercup(6) adalah 126 |

1. No.31

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| Kode Program Dalam Soal: |
| function kandang(ayam, kambing:integer):integer;  var rumput, sapi: integer;  begin  rumput:=(kambing-ayam) div 3;  sapi:=rumput\*2;  if ayam > kambing then  kandang:= 0  else if (kambing-ayam < 3) then  kandang:= 2\*(kambing-ayam)  else  kandang:= kandang(ayam,ayam+rumput)+  kandang(ayam+rumput,ayam+sapi)+  kandang(ayam+sapi,kambing);  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| function kandang(ayam, kambing:integer):integer;  var rumput, sapi: integer;  begin  writeln('rumput:= ',kambing,'-',ayam,') div 3');  rumput:=(kambing-ayam) div 3;  writeln('rumput= ',rumput);  writeln('sapi:=rumput\*2');  sapi:=rumput\*2;  writeln('sapi =',sapi);  if ayam > kambing then  begin  writeln(ayam, '>', kambing,' maka');  kandang:= 0;  writeln('kandang:= ',kandang);  end  else if (kambing-ayam < 3) then  begin  writeln(kambing,'-',ayam, '< 3 maka');  writeln('kandang:= 2\*(',kambing,' - ',ayam, ') = ');  kandang:= 2\*(kambing-ayam);  writeln('kandang=',kandang);  end  else begin  kandang:= kandang(ayam,ayam+rumput)+  kandang(ayam+rumput,ayam+sapi)+  kandang(ayam+sapi,kambing);  end;  end;  begin  a := kandang(2,6);  write(a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| rumput:= 6-2) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3-2) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3-2< 3 maka  kandang:= 2\*(3 - 2) =  kandang=2  rumput:= 4-3) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  4-3< 3 maka  kandang:= 2\*(4 - 3) =  kandang=2  rumput:= 6-4) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  6-4< 3 maka  kandang:= 2\*(6 - 4) =  kandang=4  8 |

1. No.32

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| Kode Program Dalam Soal: |
| function kandang(ayam, kambing:integer):integer;  var rumput, sapi: integer;  begin  rumput:=(kambing-ayam) div 3;  sapi:=rumput\*2;  if ayam > kambing then  kandang:= 0  else if (kambing-ayam < 3) then  kandang:= 2\*(kambing-ayam)  else  kandang:= kandang(ayam,ayam+rumput)+  kandang(ayam+rumput,ayam+sapi)+  kandang(ayam+sapi,kambing);  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| function kandang(ayam, kambing:integer):integer;  var rumput, sapi: integer;  begin  writeln('rumput:= ',kambing,'-',ayam,') div 3');  rumput:=(kambing-ayam) div 3;  writeln('rumput= ',rumput);  writeln('sapi:=rumput\*2');  sapi:=rumput\*2;  writeln('sapi =',sapi);  if ayam > kambing then  begin  writeln(ayam, '>', kambing,' maka');  kandang:= 0;  writeln('kandang:= ',kandang);  end  else if (kambing-ayam < 3) then  begin  writeln(kambing,'-',ayam, '< 3 maka');  writeln('kandang:= 2\*(',kambing,' - ',ayam, ') = ');  kandang:= 2\*(kambing-ayam);  writeln('kandang=',kandang);  end  else begin  kandang:= kandang(ayam,ayam+rumput)+  kandang(ayam+rumput,ayam+sapi)+  kandang(ayam+sapi,kambing);  end;  end;  begin  a := kandang(2014,3021);  write(a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| sapi =0  2982-2981< 3 maka  kandang:= 2\*(2982 - 2981) =  kandang=2  rumput:= 3021-2982) div 3  rumput= 13  sapi:=rumput\*2  sapi =26  rumput:= 2995-2982) div 3  rumput= 4  sapi:=rumput\*2  sapi =8  rumput:= 2986-2982) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 2983-2982) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2983-2982< 3 maka  kandang:= 2\*(2983 - 2982) =  kandang=2  rumput:= 2984-2983) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2984-2983< 3 maka  kandang:= 2\*(2984 - 2983) =  kandang=2  rumput:= 2986-2984) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2986-2984< 3 maka  kandang:= 2\*(2986 - 2984) =  kandang=4  rumput:= 2990-2986) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 2987-2986) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2987-2986< 3 maka  kandang:= 2\*(2987 - 2986) =  kandang=2  rumput:= 2988-2987) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2988-2987< 3 maka  kandang:= 2\*(2988 - 2987) =  kandang=2  rumput:= 2990-2988) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2990-2988< 3 maka  kandang:= 2\*(2990 - 2988) =  kandang=4  rumput:= 2995-2990) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 2991-2990) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2991-2990< 3 maka  kandang:= 2\*(2991 - 2990) =  kandang=2  rumput:= 2992-2991) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2992-2991< 3 maka  kandang:= 2\*(2992 - 2991) =  kandang=2  rumput:= 2995-2992) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 2993-2992) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2993-2992< 3 maka  kandang:= 2\*(2993 - 2992) =  kandang=2  rumput:= 2994-2993) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2994-2993< 3 maka  kandang:= 2\*(2994 - 2993) =  kandang=2  rumput:= 2995-2994) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2995-2994< 3 maka  kandang:= 2\*(2995 - 2994) =  kandang=2  rumput:= 3008-2995) div 3  rumput= 4  sapi:=rumput\*2  sapi =8  rumput:= 2999-2995) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 2996-2995) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2996-2995< 3 maka  kandang:= 2\*(2996 - 2995) =  kandang=2  rumput:= 2997-2996) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2997-2996< 3 maka  kandang:= 2\*(2997 - 2996) =  kandang=2  rumput:= 2999-2997) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  2999-2997< 3 maka  kandang:= 2\*(2999 - 2997) =  kandang=4  rumput:= 3003-2999) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3000-2999) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3000-2999< 3 maka  kandang:= 2\*(3000 - 2999) =  kandang=2  rumput:= 3001-3000) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3001-3000< 3 maka  kandang:= 2\*(3001 - 3000) =  kandang=2  rumput:= 3003-3001) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3003-3001< 3 maka  kandang:= 2\*(3003 - 3001) =  kandang=4  rumput:= 3008-3003) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3004-3003) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3004-3003< 3 maka  kandang:= 2\*(3004 - 3003) =  kandang=2  rumput:= 3005-3004) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3005-3004< 3 maka  kandang:= 2\*(3005 - 3004) =  kandang=2  rumput:= 3008-3005) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3006-3005) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3006-3005< 3 maka  kandang:= 2\*(3006 - 3005) =  kandang=2  rumput:= 3007-3006) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3007-3006< 3 maka  kandang:= 2\*(3007 - 3006) =  kandang=2  rumput:= 3008-3007) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3008-3007< 3 maka  kandang:= 2\*(3008 - 3007) =  kandang=2  rumput:= 3021-3008) div 3  rumput= 4  sapi:=rumput\*2  sapi =8  rumput:= 3012-3008) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3009-3008) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3009-3008< 3 maka  kandang:= 2\*(3009 - 3008) =  kandang=2  rumput:= 3010-3009) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3010-3009< 3 maka  kandang:= 2\*(3010 - 3009) =  kandang=2  rumput:= 3012-3010) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3012-3010< 3 maka  kandang:= 2\*(3012 - 3010) =  kandang=4  rumput:= 3016-3012) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3013-3012) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3013-3012< 3 maka  kandang:= 2\*(3013 - 3012) =  kandang=2  rumput:= 3014-3013) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3014-3013< 3 maka  kandang:= 2\*(3014 - 3013) =  kandang=2  rumput:= 3016-3014) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3016-3014< 3 maka  kandang:= 2\*(3016 - 3014) =  kandang=4  rumput:= 3021-3016) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3017-3016) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3017-3016< 3 maka  kandang:= 2\*(3017 - 3016) =  kandang=2  rumput:= 3018-3017) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3018-3017< 3 maka  kandang:= 2\*(3018 - 3017) =  kandang=2  rumput:= 3021-3018) div 3  rumput= 1  sapi:=rumput\*2  sapi =2  rumput:= 3019-3018) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3019-3018< 3 maka  kandang:= 2\*(3019 - 3018) =  kandang=2  rumput:= 3020-3019) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3020-3019< 3 maka  kandang:= 2\*(3020 - 3019) =  kandang=2  rumput:= 3021-3020) div 3  rumput= 0  sapi:=rumput\*2  sapi =0  3021-3020< 3 maka  kandang:= 2\*(3021 - 3020) =  kandang=2  2014 |

1. No.33

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| --- |
| Kode Program Dalam Soal: |
| var  i,j,x,baa:longint;  begin  x:=0;  baa:=10;  for i:=1 to baa do begin  for j:= 1 to i do begin  if i mod 2=1 then  x:=x-j  else  x:=x+j;  end;  end;  writeln(x);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  i,j,x,baa:longint;  begin  x:=0;  baa:=10;  for i:=1 to baa do begin  for j:= 1 to i do begin  writeln('i =',i);  writeln('j =',j);  if i mod 2=1 then begin  writeln('x = ',x);  x:=x-j;  end  else begin  writeln('x= ',x);  x:=x+j;  end;  end;  end;  writeln(x);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| i =1  j =1  x = 0  i =2  j =1  x= -1  i =2  j =2  x= 0  i =3  j =1  x = 2  i =3  j =2  x = 1  i =3  j =3  x = -1  i =4  j =1  x= -4  i =4  j =2  x= -3  i =4  j =3  x= -1  i =4  j =4  x= 2  i =5  j =1  x = 6  i =5  j =2  x = 5  i =5  j =3  x = 3  i =5  j =4  x = 0  i =5  j =5  x = -4  i =6  j =1  x= -9  i =6  j =2  x= -8  i =6  j =3  x= -6  i =6  j =4  x= -3  i =6  j =5  x= 1  i =6  j =6  x= 6  i =7  j =1  x = 12  i =7  j =2  x = 11  i =7  j =3  x = 9  i =7  j =4  x = 6  i =7  j =5  x = 2  i =7  j =6  x = -3  i =7  j =7  x = -9  i =8  j =1  x= -16  i =8  j =2  x= -15  i =8  j =3  x= -13  i =8  j =4  x= -10  i =8  j =5  x= -6  i =8  j =6  x= -1  i =8  j =7  x= 5  i =8  j =8  x= 12  i =9  j =1  x = 20  i =9  j =2  x = 19  i =9  j =3  x = 17  i =9  j =4  x = 14  i =9  j =5  x = 10  i =9  j =6  x = 5  i =9  j =7  x = -1  i =9  j =8  x = -8  i =9  j =9  x = -16  i =10  j =1  x= -25  i =10  j =2  x= -24  i =10  j =3  x= -22  i =10  j =4  x= -19  i =10  j =5  x= -15  i =10  j =6  x= -10  i =10  j =7  x= -4  i =10  j =8  x= 3  i =10  j =9  x= 11  i =10  j =10  x= 20  30 |

1. No.34

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| --- |
| Kode Program Dalam Soal: |
| var  i,j,x,baa:longint;  begin  x:=0;  baa:=10;  for i:=1 to baa do begin  for j:= 1 to i do begin  if i mod 2=1 then  x:=x-j  else  x:=x+j;  end;  end;  writeln(x);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  i,j,x,baa:longint;  begin  x:=0;  baa:=1000;  for i:=1 to baa do begin  for j:= 1 to i do begin  writeln('i =',i);  writeln('j =',j);  if i mod 2=1 then begin  writeln('x = ',x);  x:=x-j;  end  else begin  writeln('x= ',x);  x:=x+j;  end;  end;  end;  writeln(x);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| x= 155450  i =1000  j =902  x= 156351  i =1000  j =903  x= 157253  i =1000  j =904  x= 158156  i =1000  j =905  x= 159060  i =1000  j =906  x= 159965  i =1000  j =907  x= 160871  i =1000  j =908  x= 161778  i =1000  j =909  x= 162686  i =1000  j =910  x= 163595  i =1000  j =911  x= 164505  i =1000  j =912  x= 165416  i =1000  j =913  x= 166328  i =1000  j =914  x= 167241  i =1000  j =915  x= 168155  i =1000  j =916  x= 169070  i =1000  j =917  x= 169986  i =1000  j =918  x= 170903  i =1000  j =919  x= 171821  i =1000  j =920  x= 172740  i =1000  j =921  x= 173660  i =1000  j =922  x= 174581  i =1000  j =923  x= 175503  i =1000  j =924  x= 176426  i =1000  j =925  x= 177350  i =1000  j =926  x= 178275  i =1000  j =927  x= 179201  i =1000  j =928  x= 180128  i =1000  j =929  x= 181056  i =1000  j =930  x= 181985  i =1000  j =931  x= 182915  i =1000  j =932  x= 183846  i =1000  j =933  x= 184778  i =1000  j =934  x= 185711  i =1000  j =935  x= 186645  i =1000  j =936  x= 187580  i =1000  j =937  x= 188516  i =1000  j =938  x= 189453  i =1000  j =939  x= 190391  i =1000  j =940  x= 191330  i =1000  j =941  x= 192270  i =1000  j =942  x= 193211  i =1000  j =943  x= 194153  i =1000  j =944  x= 195096  i =1000  j =945  x= 196040  i =1000  j =946  x= 196985  i =1000  j =947  x= 197931  i =1000  j =948  x= 198878  i =1000  j =949  x= 199826  i =1000  j =950  x= 200775  i =1000  j =951  x= 201725  i =1000  j =952  x= 202676  i =1000  j =953  x= 203628  i =1000  j =954  x= 204581  i =1000  j =955  x= 205535  i =1000  j =956  x= 206490  i =1000  j =957  x= 207446  i =1000  j =958  x= 208403  i =1000  j =959  x= 209361  i =1000  j =960  x= 210320  i =1000  j =961  x= 211280  i =1000  j =962  x= 212241  i =1000  j =963  x= 213203  i =1000  j =964  x= 214166  i =1000  j =965  x= 215130  i =1000  j =966  x= 216095  i =1000  j =967  x= 217061  i =1000  j =968  x= 218028  i =1000  j =969  x= 218996  i =1000  j =970  x= 219965  i =1000  j =971  x= 220935  i =1000  j =972  x= 221906  i =1000  j =973  x= 222878  i =1000  j =974  x= 223851  i =1000  j =975  x= 224825  i =1000  j =976  x= 225800  i =1000  j =977  x= 226776  i =1000  j =978  x= 227753  i =1000  j =979  x= 228731  i =1000  j =980  x= 229710  i =1000  j =981  x= 230690  i =1000  j =982  x= 231671  i =1000  j =983  x= 232653  i =1000  j =984  x= 233636  i =1000  j =985  x= 234620  i =1000  j =986  x= 235605  i =1000  j =987  x= 236591  i =1000  j =988  x= 237578  i =1000  j =989  x= 238566  i =1000  j =990  x= 239555  i =1000  j =991  x= 240545  i =1000  j =992  x= 241536  i =1000  j =993  x= 242528  i =1000  j =994  x= 243521  i =1000  j =995  x= 244515  i =1000  j =996  x= 245510  i =1000  j =997  x= 246506  i =1000  j =998  x= 247503  i =1000  j =999  x= 248501  i =1000  j =1000  x= 249500  250500 |

1. No.35

|  |
| --- |
| Kode Program Dalam Soal: |
| var x,n,lala,lili,i:integer;  begin  x:=7; n:=x;  lala:=10;  lili:=12345;  for i:=0 to lili do  begin  x:=(x\*n) mod lala;  end;  writeln(x);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var x,n,lala,lili,i:integer;  begin  x:=7; n:=x;  lala:=10;  lili:=12345;  for i:=0 to lili do  begin  writeln('x = ',x);  x:=(x\*n) mod lala;  end;  writeln(x);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  x = 3  x = 1  x = 7  x = 9  3 |

1. No.36

|  |
| --- |
| Kode Program Dalam Soal: |
| var x,n,lala,lili,i:integer;  begin  x:=7; n:=x;  lala:=10;  lili:=12345;  for i:=0 to lili do  begin  x:=(x\*n) mod lala;  end;  writeln(x);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var x,n,lala,lili,i:integer;  begin  x:=9; n:=x;  lala:=100;  lili:=12345;  for i:=0 to lili do  begin  writeln('x = ',x);  x:=(x\*n) mod lala;  end;  writeln(x);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  x = 69  x = 21  x = 89  x = 1  x = 9  x = 81  x = 29  x = 61  x = 49  x = 41  69 |

1. No.37

|  |
| --- |
| Kode Program Dalam Soal: |
| var x:integer;  function lala(lili:integer):integer;  var abc,i:integer;  begin  abc:=0;  if (lili mod 5 = 0) then  begin  for i:=1 to 7 do abc:=abc+lala(lili div 5);  end else if (lili mod 3 = 0) then  begin  for i:=1 to 5 do abc:=abc+lala(lili div 3);  end else if (lili mod 2 = 0) then  begin  abc:=lala(lili div 2)+lala(lili div 2);  end;  if (lili=1) then lala:=1 else  lala:=abc;  end;  begin  x:=25;  writeln(lala(x));  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var x:integer;  function lala(lili:integer):integer;  var abc,i:integer;  begin  abc:=0;  if (lili mod 5 = 0) then  begin  for i:=1 to 7 do begin  abc:=abc+lala(lili div 5);  writeln('abc:= ',abc); end;  end else if (lili mod 3 = 0) then  begin  writeln('if (',lili,' mod 3 = 0) ');  for i:=1 to 5 do begin  abc:=abc+lala(lili div 3);  end;  end else if (lili mod 2 = 0) then  begin  abc:=lala(lili div 2)+lala(lili div 2);  end;  if (lili=1) then lala:=1 else  lala:=abc;  end;  begin  x:=25;  writeln(lala(x));  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 7  abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 14  abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 21  abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 28  abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 35  abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 42  abc:= 1  abc:= 2  abc:= 3  abc:= 4  abc:= 5  abc:= 6  abc:= 7  abc:= 49  49 |

1. No.38

|  |
| --- |
| Kode Program Dalam Soal: |
| var x:integer;  function lala(lili:integer):integer;  var abc,i:integer;  begin  abc:=0;  if (lili mod 5 = 0) then  begin  for i:=1 to 7 do abc:=abc+lala(lili div 5);  end else if (lili mod 3 = 0) then  begin  for i:=1 to 5 do abc:=abc+lala(lili div 3);  end else if (lili mod 2 = 0) then  begin  abc:=lala(lili div 2)+lala(lili div 2);  end;  if (lili=1) then lala:=1 else  lala:=abc;  end;  begin  x:=25;  writeln(lala(x));  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var x:integer;  function lala(lili:integer):integer;  var abc,i:integer;  begin  abc:=0;  if (lili mod 5 = 0) then  begin  for i:=1 to 7 do begin  abc:=abc+lala(lili div 5);  writeln('abc:= ',abc); end;  end else if (lili mod 3 = 0) then  begin  writeln('if (',lili,' mod 3 = 0) ');  for i:=1 to 5 do begin  abc:=abc+lala(lili div 3);  end;  end else if (lili mod 2 = 0) then  begin  abc:=lala(lili div 2)+lala(lili div 2);  end;  if (lili=1) then lala:=1 else  lala:=abc;  end;  begin  x:=25;  writeln(lala(x));  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| abc:= 0  abc:= 0  abc:= 0  abc:= 0  abc:= 0  abc:= 0  abc:= 0  0 |

1. No.39

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| --- |
| Kode Program Dalam Soal: |
| var aku,sayang,kamu:integer;  begin  aku:=1;  sayang:=0;  kamu:=1;  while (sayang<=100) do  begin  aku:=aku+kamu;  inc(sayang);  inc(kamu); inc(kamu);  end;  writeln(aku);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  aku,sayang,kamu:integer;  begin  aku:=1;  sayang:=0;  kamu:=1;  while (sayang<=100) do  begin  aku:=aku+kamu;  inc(sayang);  inc(kamu); inc(kamu);  writeln('aku ',aku,' sayang ',sayang);  end;  writeln();  writeln('aku = ',aku);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| aku 2 sayang 1  aku 5 sayang 2  aku 10 sayang 3  aku 17 sayang 4  aku 26 sayang 5  aku 37 sayang 6  aku 50 sayang 7  aku 65 sayang 8  aku 82 sayang 9  aku 101 sayang 10  aku 122 sayang 11  aku 145 sayang 12  aku 170 sayang 13  aku 197 sayang 14  aku 226 sayang 15  aku 257 sayang 16  aku 290 sayang 17  aku 325 sayang 18  aku 362 sayang 19  aku 401 sayang 20  aku 442 sayang 21  aku 485 sayang 22  aku 530 sayang 23  aku 577 sayang 24  aku 626 sayang 25  aku 677 sayang 26  aku 730 sayang 27  aku 785 sayang 28  aku 842 sayang 29  aku 901 sayang 30  aku 962 sayang 31  aku 1025 sayang 32  aku 1090 sayang 33  aku 1157 sayang 34  aku 1226 sayang 35  aku 1297 sayang 36  aku 1370 sayang 37  aku 1445 sayang 38  aku 1522 sayang 39  aku 1601 sayang 40  aku 1682 sayang 41  aku 1765 sayang 42  aku 1850 sayang 43  aku 1937 sayang 44  aku 2026 sayang 45  aku 2117 sayang 46  aku 2210 sayang 47  aku 2305 sayang 48  aku 2402 sayang 49  aku 2501 sayang 50  aku 2602 sayang 51  aku 2705 sayang 52  aku 2810 sayang 53  aku 2917 sayang 54  aku 3026 sayang 55  aku 3137 sayang 56  aku 3250 sayang 57  aku 3365 sayang 58  aku 3482 sayang 59  aku 3601 sayang 60  aku 3722 sayang 61  aku 3845 sayang 62  aku 3970 sayang 63  aku 4097 sayang 64  aku 4226 sayang 65  aku 4357 sayang 66  aku 4490 sayang 67  aku 4625 sayang 68  aku 4762 sayang 69  aku 4901 sayang 70  aku 5042 sayang 71  aku 5185 sayang 72  aku 5330 sayang 73  aku 5477 sayang 74  aku 5626 sayang 75  aku 5777 sayang 76  aku 5930 sayang 77  aku 6085 sayang 78  aku 6242 sayang 79  aku 6401 sayang 80  aku 6562 sayang 81  aku 6725 sayang 82  aku 6890 sayang 83  aku 7057 sayang 84  aku 7226 sayang 85  aku 7397 sayang 86  aku 7570 sayang 87  aku 7745 sayang 88  aku 7922 sayang 89  aku 8101 sayang 90  aku 8282 sayang 91  aku 8465 sayang 92  aku 8650 sayang 93  aku 8837 sayang 94  aku 9026 sayang 95  aku 9217 sayang 96  aku 9410 sayang 97  aku 9605 sayang 98  aku 9802 sayang 99  aku 10001 sayang 100  aku 10202 sayang 101  aku = 10202 |

1. No.40

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| --- |
| Kode Program Dalam Soal: |
| var i,j:integer;  lala:boolean;  begin  for i:=2 to 100 do  begin  lala:=true;  j:=2;  while (j\*j<=i) do  begin  if (i mod j = 0) then lala:=false;  inc(j);  end;  if (lala=true) then write(i);  end;  end. |
| Kode Program Dimodifikasi: (diwarnai) |
| var i,a,j:integer;  lala:boolean;  begin  a:=0;  for i:=2 to 100 do  begin  lala:=true;  j:=2;  while (j\*j<=i) do  begin  if (i mod j = 0) then lala:=false;  inc(j);  end;  if (lala=true) then a:=a+i;  writeln('i = ',i);  end;  writeln(' Hasil = ',a);  readln;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| i = 2 i = 3 i = 4 i = 5 i = 6 i = 7 i = 8 i = 9 i = 10 i = 11  i=12 i = 13 i = 14 i = 15 i = 16 i = 17 i = 18 i = 19 i = 20 i = 21 i = 22 i = 23 i = 24 i = 25 i = 26 i = 27 i = 28 i = 29 i = 30 i = 31 i = 32 i = 33 i = 34 i = 35 i = 36 i = 37 i = 38 i = 39 i = 40 i = 41 i = 42 i = 43 i = 44 i = 45 i = 46 i = 47 i = 48 i = 49 i = 50 i = 51 i = 52 i = 53 i = 54 i = 55 i = 56 i = 57 i = 58 i = 59 i = 60 i = 61 i = 62 i = 63 i = 64 i = 65 i = 66 i = 67 i = 68 i = 69 i = 70 i = 71 i = 72 i = 73 i = 74 i = 75 i = 76 i = 77 i = 78 i = 79 i = 80 i = 81 i = 82 i = 83 i = 84 i = 85 i = 86 i = 87 i = 88 i = 89 i = 90 i = 91 i = 92 i = 93 i = 94 i = 95 i = 96 i = 97 i = 98 i = 99 i = 100  Hasil = 1060 |

1. No.41

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| --- |
| Kode Program Dalam Soal: |
| function iseng(x, y:integer):integer;  begin  if (y <= 0) then  iseng := x  else if (y mod 2 = 0) then  iseng := iseng(x-y, y-1)  else  iseng := iseng(x+2\*y, y-1);  end; |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a : integer;  function iseng(x, y:integer):integer;  begin  if (y <= 0) then  iseng := x  else if (y mod 2 = 0) then  iseng := iseng(x-y, y-1)  else  iseng := iseng(x+2\*y, y-1);  writeln('hasil: ',y);  end;  begin  a := iseng(500,100);  write(a);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| hasil: 0  hasil: 1  hasil: 2  hasil: 3  hasil: 4  hasil: 5  hasil: 6  hasil: 7  hasil: 8  hasil: 9  hasil: 10  hasil: 11  hasil: 12  hasil: 13  hasil: 14  hasil: 15  hasil: 16  hasil: 17  hasil: 18  hasil: 19  hasil: 20  hasil: 21  hasil: 22  hasil: 23  hasil: 24  hasil: 25  hasil: 26  hasil: 27  hasil: 28  hasil: 29  hasil: 30  hasil: 31  hasil: 32  hasil: 33  hasil: 34  hasil: 35  hasil: 36  hasil: 37  hasil: 38  hasil: 39  hasil: 40  hasil: 41  hasil: 42  hasil: 43  hasil: 44  hasil: 45  hasil: 46  hasil: 47  hasil: 48  hasil: 49  hasil: 50  hasil: 51  hasil: 52  hasil: 53  hasil: 54  hasil: 55  hasil: 56  hasil: 57  hasil: 58  hasil: 59  hasil: 60  hasil: 61  hasil: 62  hasil: 63  hasil: 64  hasil: 65  hasil: 66  hasil: 67  hasil: 68  hasil: 69  hasil: 70  hasil: 71  hasil: 72  hasil: 73  hasil: 74  hasil: 75  hasil: 76  hasil: 77  hasil: 78  hasil: 79  hasil: 80  hasil: 81  hasil: 82  hasil: 83  hasil: 84  hasil: 85  hasil: 86  hasil: 87  hasil: 88  hasil: 89  hasil: 90  hasil: 91  hasil: 92  hasil: 93  hasil: 94  hasil: 95  hasil: 96  hasil: 97  hasil: 98  hasil: 99  hasil: 100  2950 |

1. No.42

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| --- |
| Kode Program Dalam Soal: |
| count := 0;  for i := 1 to n do  begin  x := i;  while (x > 0) do  begin  if (x mod 10 = 1) then  inc(count);  x := x div 10;  end;  end;  writeln(count); |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a,x,count,i,n : integer;  begin  n := 12 ;  count := 0;  for i := 1 to n do  begin  x := i;  while (x > 0) do  begin  if (x mod 10 = 1) then  inc(count);  writeln('count := ',count);  x := x div 10;  writeln('x = ',x,' div 10');  writeln('hasil = ',x);  end;  end;  writeln(count);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 0 div 10  hasil = 0  count := 1  x = 1 div 10  hasil = 1  count := 2  x = 0 div 10  hasil = 0  count := 3  x = 1 div 10  hasil = 1  count := 4  x = 0 div 10  hasil = 0  count := 4  x = 1 div 10  hasil = 1  count := 5  x = 0 div 10  hasil = 0  5 |

1. No.43

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| --- |
| Kode Program Dalam Soal: |
| count := 0;  for i := 1 to n do  begin  x := i;  while (x > 0) do  begin  if (x mod 10 = 1) then  inc(count);  x := x div 10;  end;  end;  writeln(count); |
| Kode Program Dimodifikasi: (diwarnai) |
| uses crt;  var  a,x,count,i,n : integer;  begin  n := 10000 ;  count := 0;  for i := 1 to n do  begin  x := i;  while (x > 0) do  begin  if (x mod 10 = 1) then  inc(count);  writeln('count := ',count);  x := x div 10;  writeln('x = ',x,' div 10');  writeln('hasil = ',x);  end;  end;  writeln(count);  readkey;  end. |
| Output Dari Kode Program Yang Dimodifikasi: |
| inc(count) =3999  (99 div 10)= 99    while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =3999  (9 div 10)= 9    while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =3999  (0 div 10)= 0    while ( 9987 > 0 )  (9987 mod 10 = 1)  inc(count) =3999  (998 div 10)= 998    while ( 998 > 0 )  (998 mod 10 = 1)  inc(count) =3999  (99 div 10)= 99    while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =3999  (9 div 10)= 9    while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =3999  (0 div 10)= 0    while ( 9988 > 0 )  (9988 mod 10 = 1)  inc(count) =3999  (998 div 10)= 998    while ( 998 > 0 )  (998 mod 10 = 1)  inc(count) =3999  (99 div 10)= 99  while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =3999  (9 div 10)= 9  while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =3999  (0 div 10)= 0  while ( 9989 > 0 )  (9989 mod 10 = 1)  inc(count) =3999  (998 div 10)= 998  while ( 998 > 0 )  (998 mod 10 = 1)  inc(count) =3999  (99 div 10)= 99  while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =3999  (9 div 10)= 9  while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =3999  (0 div 10)= 0  while ( 9990 > 0 )  (9990 mod 10 = 1)  inc(count) =3999  (999 div 10)= 999  while ( 999 > 0 )  (999 mod 10 = 1)  inc(count) =3999  (99 div 10)= 99  while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =3999  (9 div 10)= 9  while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =3999  (0 div 10)= 0  while ( 9991 > 0 )  (9991 mod 10 = 1)  inc(count) =4000  (999 div 10)= 999  while ( 999 > 0 )  (999 mod 10 = 1)  inc(count) =4000  (99 div 10)= 99  while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =4000  (9 div 10)= 9  while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =4000  (0 div 10)= 0  while ( 9992 > 0 )  (9992 mod 10 = 1)  inc(count) =4000  (999 div 10)= 999  while ( 999 > 0 )  (999 mod 10 = 1)  inc(count) =4000  (99 div 10)= 99  while ( 99 > 0 )  (99 mod 10 = 1)  inc(count) =4000  (9 div 10)= 9  while ( 9 > 0 )  (9 mod 10 = 1)  inc(count) =4000  (0 div 10)= 0 while ( 9993 > 0 ) (9993 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 9994 > 0 ) (9994 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 9995 > 0 ) (9995 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 9996 > 0 ) (9996 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 9997 > 0 ) (9997 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 9998 > 0 ) (9998 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 9999 > 0 ) (9999 mod 10 = 1) inc(count) =4000 (999 div 10)= 999 while ( 999 > 0 ) (999 mod 10 = 1) inc(count) =4000 (99 div 10)= 99 while ( 99 > 0 ) (99 mod 10 = 1) inc(count) =4000 (9 div 10)= 9 while ( 9 > 0 ) (9 mod 10 = 1) inc(count) =4000 (0 div 10)= 0 while ( 10000 > 0 ) (10000 mod 10 = 1) inc(count) =4000 (1000 div 10)= 1000 while ( 1000 > 0 ) (1000 mod 10 = 1) inc(count) =4000 (100 div 10)= 100 while ( 100 > 0 ) (100 mod 10 = 1) inc(count) =4000 (10 div 10)= 10 while ( 10 > 0 ) (10 mod 10 = 1) inc(count) =4000 (1 div 10)= 1 while ( 1 > 0 ) (1 mod 10 = 1) inc(count) =4001 (0 div 10)= 0 jadi nilai dari count adalah = 4001 |

1. No.44

|  |
| --- |
| Kode Program Dalam Soal: |
| function gembel(x,y : integer) : integer;  begin  if y=0 then gembel := x  else gembel := gembel(y,x mod y);  end;  function wedhus(n : integer) : integer;  var pedhet : integer;  begin  pedhet := 0;  for i:= n-1 downto 1 do  begin  if gembel(n,i)=1 then pedhet := pedhet+1;  end;  wedhus := pedhet;  end; |
| Kode Program Dimodifikasi: (diwarnai) |
|  |
| Output Dari Kode Program Yang Dimodifikasi: |
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1. No.45

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| --- |
| Kode Program Dalam Soal: |
| function gembel(x,y : integer) : integer;  begin  if y=0 then gembel := x  else gembel := gembel(y,x mod y);  end;  function wedhus(n : integer) : integer;  var pedhet : integer;  begin  pedhet := 0;  for i:= n-1 downto 1 do  begin  if gembel(n,i)=1 then pedhet := pedhet+1;  end;  wedhus := pedhet;  end; |
| Kode Program Dimodifikasi: (diwarnai) |
|  |
| Output Dari Kode Program Yang Dimodifikasi: |
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1. No.46

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| --- |
| Kode Program Dalam Soal: |
| var i,j: integer;  var board: array[0..5] of longint;  function kepo():integer;  var n:integer = 0;  begin  for i := 5 downto 0 do begin  n := n shl 1;  n := n + (board[i] mod 2);  end;  kepo:=n;  end;  procedure tambah();  begin  for i := 0 to 17 do  for j := 0 to 5 do  board[j] := board[j] + sqr(j+i);  end;  begin  for i := 0 to 5 do  board[i] := i;  tambah();  writeln(kepo());  end. |
| Kode Program Dimodifikasi: (diwarnai) |
|  |
| Output Dari Kode Program Yang Dimodifikasi: |
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1. No.47

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| --- |
| Kode Program Dalam Soal: |
| var i,j: integer;  var board: array[0..5] of longint;  function kepo():integer;  var n:integer = 0;  begin  for i := 5 downto 0 do begin  n := n shl 1;  n := n + (board[i] mod 2);  end;  kepo:=n;  end;  procedure tambah();  begin  for i := 0 to 17 do  for j := 0 to 5 do  board[j] := board[j] + sqr(j+i);  end;  begin  for i := 0 to 5 do  board[i] := i;  tambah();  writeln(kepo());  end. |
| Kode Program Dimodifikasi: (diwarnai) |
|  |
| Output Dari Kode Program Yang Dimodifikasi: |
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1. No.48

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| --- |
| Kode Program Dalam Soal: |
| var  data1 : array[1..10] of integer = (4,11,2,5,1,9,7,5,6,8);  data2,data3 : array[1..10] of integer;  i : integer;  begin  for i:= 1 to 10 do  data2[i] := 1;  for i:= 1 to 10 do  inc(data2[data1[i]]);  for i:= 2 to 10 do  data2[i] := data2[i] + data2[i-1];  for i:= 10 downto 1 do  begin  data3[data2[data1[i]]] := data1[i];  dec(data2[data1[i]]);  end;  for i:= 1 to 10 do  write(data3[i]);  end. |
| Kode Program Dimodifikasi: (diwarnai) |
|  |
| Output Dari Kode Program Yang Dimodifikasi: |
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1. No.49

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| Kode Program Dalam Soal: |
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| Kode Program Dimodifikasi: (diwarnai) |
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| Output Dari Kode Program Yang Dimodifikasi: |
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1. No.50

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| --- |
| Kode Program Dalam Soal: |
|  |
| Kode Program Dimodifikasi: (diwarnai) |
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| Output Dari Kode Program Yang Dimodifikasi: |
|  |