NOTASI KRS DAN KHS

```
sks1, sks2, sks3, sks4, sks5, sks6, sks7, totsks, jmlh, a, jmlhmk ←int
totnilai, rata, persentgs1, persentgs2, persentgs3, persentgs4, persentgs5, persentgs6,
persentgs7 ← float
persenuas1, persenuas2, persenuas3, persenuas4, persenuas5, persenuas6, persenuas7 ← float
nilaitgs1, nilaitgs2, nilaitgs3, nilaitgs4, nilaitgs5, nilaitgs6, nilaitgs7 ←float
nilaiuts1, nilaiuts2, nilaiuts3, nilaiuts4, nilaiuts5, nilaiuts6, nilaiuts7 ← float
nilaiuas1, nilaiuas2, nilaiuas3, nilaiuas4, nilaiuas5, nilaiuas6, nilaiuas7 ← float
jn1, jn2, jn3, jn4, jn5, jn6, jn7 \leftarrow float
ip, ip1, ip2, ip3, ip4, ip5, ip6, ip7 ←float
pred1, pred2, pred3, pred4, pred5, pred6, pred7 ← string
nama, nim, prodi, jns, mk1, mk2, mk3, mk4, mk5, mk6, mk7 ←string
output " KARTU RENCANA STUDI"
input nim
input nama
input jmlhmk
  ouput Mata Kuliah Ke
                                 : 1
  input Masukkan Mata Kuliah, mk1
  input SKS, sks1;
  input Teori atau Praktik [T/P/(TAPI)], jns
  do {
  if(jns== "T" || jns=="t"){
       output "Persentase Nilai Tugas:"
       input persentgs1
       output "Nilai Tugas
       Input nilaitgs1
```

```
Output "Persentase Nilai UTS : "
  Input persenuts1
  output "Nilai UTS
  input nilaiuts1
  output "Persentase Nilai UAS : "
  input persenuas1
                            : "
  ouput "Nilai UAS
  input nilaiuas1
}
else if(jns=="P" || jns=="p"){
  ouput "Persentase Nilai Tugas:"
  input persentgs1
  ouput "Nilai Tugas
  input nilaitgs1
  ouput "Persentase Nilai UTS : "
  input persenuts1
                            : "
  output "Nilai UTS
  input nilaiuts1
  output "Persentase Nilai UAS : "
  input persenuas1
  output "Nilai UAS
  input nilaiuas1
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs1
  output "Nilai Tugas Teori
  input nilaitgs1
  output "Persentase Nilai UTS Teori :
```

```
input persenuts1
     output "Nilai UTS Teori
                                     : "
     input nilaiuts1;
     output "Persentase Nilai UAS Teori : "
     input persenuas1
                                     : "
     output "Nilai UAS Teori
     input nilaiuas1
     output "Persentase Nilai Tugas Praktik:
     input persentgs1
                                       : "
     output "Nilai Tugas Praktik
     input nilaitgs1
     output "Persentase Nilai UTS Praktik : "
     input persenuts1
     output "Nilai UTS Praktik
                                      :
     input nilaiuts1
     output "Persentase Nilai UAS Praktik : "
     input persenuas1
                                       : "
     output "Nilai UAS Praktik
     input nilaiuas1;
  if(persentgs1+persenuts1+persenuas1!=100){
     output "Inputan salah, Persentase melebihi/kurang dari 100."
     Output "Masukkan inputan ulang!"
  } while(persentgs1+persenuts1+persenuas1!=100);
if (jmlhmk >= 2)
                                      : 2"
     output "Mata Kuliah Ke
     output "Masukkan Mata Kuliah
```

}

}

```
input mk2
                                : "
    input "SKS
    input sks2
     output "Teori atau Praktik [T/P/(TP)]:"
    input ins
do {
  if(jns== "T" || jns=="t"){
    output "Persentase Nilai Tugas:
    input persentgs2
    output "Nilai Tugas
    input nilaitgs2
    output "Persentase Nilai UTS : "
    input persenuts2
    output "Nilai UTS
    input nilaiuts2
     output "Persentase Nilai UAS : "
    input persenuas2
                               : "
    output "Nilai UAS
    input nilaiuas2
  }
  else if(jns=="P" || jns=="p"){
    output "Persentase Nilai Tugas:"
    input persentgs2
    output "Nilai Tugas
    input nilaitgs2
     output "Persentase Nilai UTS : "
     input persenuts2
```

```
output "Nilai UTS
  input nilaiuts2
  output "Persentase Nilai UAS : "
  input persenuas2
                             : "
  output "Nilai UAS
  input nilaiuas2
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs2
  output "Nilai Tugas Teori
                                   : "
  input nilaitgs2
  output "Persentase Nilai UTS Teori : "
  input persenuts2
  output "Nilai UTS Teori
                                   : "
  input nilaiuts2
  output "Persentase Nilai UAS Teori : "
  input persenuas2
                                   : "
  output "Nilai UAS Teori
  input nilaiuas2
  output "Persentase Nilai Tugas Praktik:"
  input persentgs2
                                     : "
  output "Nilai Tugas Praktik
  input nilaitgs2
  output "Persentase Nilai UTS Praktik : "
  input persenuts2
  output "Nilai UTS Praktik
                                    :";
  input nilaiuts2
  output "Persentase Nilai UAS Praktik : "
  input persenuas2
```

```
input nilaiuas2
     }
    if(persentgs2+persenuts2+persenuas2!=100){
       output "Inputan salah, Persentase melebihi /kurang dari 100."
       output "Masukkan inputan ulang!"
     }
     }while(persentgs2+persenuts2+persenuas2!=100);
  }
if (jmlhmk >= 3){
       output "Mata Kuliah Ke
                                   : 3"
       output "Masukkan Mata Kuliah
                                            : "
       input mk3
       input "SKS
                                   : "
       input sks3
       output "Teori atau Praktik [T/P/(TP)]:"
       input jns
  do {
    if(jns == "T" \parallel jns == "t") \{
       output "Persentase Nilai Tugas:
       input persentgs3
       output "Nilai Tugas
       input nilaitgs3
       output "Persentase Nilai UTS : "
       input persenuts3
       output "Nilai UTS
```

output "Nilai UAS Praktik

```
input nilaiuts3
  output "Persentase Nilai UAS : "
  input persenuas3
                             : "
  output "Nilai UAS
  input nilaiuas3
}
else if(jns=="P" \parallel jns=="p"){
  output "Persentase Nilai Tugas:"
  input persentgs3
  output "Nilai Tugas
  input nilaitgs3
  output "Persentase Nilai UTS : "
  input persenuts3
  output "Nilai UTS
                             : "
  input nilaiuts3
  output "Persentase Nilai UAS : "
  input persenuas3
                             : "
  output "Nilai UAS
  input nilaiuas3
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs3
  output "Nilai Tugas Teori
  input nilaitgs3
  output "Persentase Nilai UTS Teori : "
  input persenuts3
  output "Nilai UTS Teori
  input nilaiuts3
```

```
input persenuas3
     output "Nilai UAS Teori
                                     : "
     input nilaiuas3
     output "Persentase Nilai Tugas Praktik:"
     input persentgs3
                                       : "
     output "Nilai Tugas Praktik
     input nilaitgs3
     output "Persentase Nilai UTS Praktik : "
     input persenuts3
     output "Nilai UTS Praktik
                                       :";
     input nilaiuts3
     output "Persentase Nilai UAS Praktik : "
    input persenuas3
     output "Nilai UAS Praktik
                                       : "
     input nilaiuas3
  }
  if (persentgs 3 + persenuts 3 + persenuas 3! = 100) \{
     output "Inputan salah, Persentase melebihi /kurang dari 100."
     output "Masukkan inputan ulang!"
  }
  } while(persentgs3+persenuts3+persenuas3!=100);
}
if (jmlhmk >= 4)
     output "Mata Kuliah Ke
                                       : 4"
     output "Masukkan Mata Kuliah
     input mk4
     input "SKS
```

output "Persentase Nilai UAS Teori : "

```
input sks4
     output "Teori atau Praktik [T/P/(TP)]:"
     input jns
do {
  if(jns== "T" || jns=="t"){
     output "Persentase Nilai Tugas:
     input persentgs4
     output "Nilai Tugas
     input nilaitgs4
     output "Persentase Nilai UTS : "
     input persenuts4
                                : "
     output "Nilai UTS
     input nilaiuts4
     output "Persentase Nilai UAS : "
     input persenuas4
                                : "
     output "Nilai UAS
     input nilaiuas4
  }
  else if(jns=="P" \parallel jns=="p"){
    output "Persentase Nilai Tugas:"
     input persentgs4
     output "Nilai Tugas
     input nilaitgs4
     output "Persentase Nilai UTS : "
     input persenuts4
     output "Nilai UTS
     input nilaiuts4
```

```
output "Persentase Nilai UAS : "
  input persenuas4
                             : "
  output "Nilai UAS
  input nilaiuas4
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs4
                                   : "
  output "Nilai Tugas Teori
  input nilaitgs4
  output "Persentase Nilai UTS Teori : "
  input persenuts4
                                   : "
  output "Nilai UTS Teori
  input nilaiuts4
  output "Persentase Nilai UAS Teori : "
  input persenuas4
                                   : "
  output "Nilai UAS Teori
  input nilaiuas4
  output "Persentase Nilai Tugas Praktik:"
  input persentgs4
  output "Nilai Tugas Praktik
                                     : "
  input nilaitgs4
  output "Persentase Nilai UTS Praktik : "
  input persenuts4
  output "Nilai UTS Praktik
                                    : ";
  input nilaiuts4
  output "Persentase Nilai UAS Praktik : "
  input persenuas4
  output "Nilai UAS Praktik
  input nilaiuas4
```

```
}
  if(persentgs4+persenuts4+persenuas4!=100){
    output "Inputan salah, Persentase melebihi /kurang dari 100."
    output "Masukkan inputan ulang!"
  }
  }while(persentgs4+persenuts4+persenuas4!=100);
}
if (jmlhmk >= 5){
    output "Mata Kuliah Ke
                                    : 5"
    output "Masukkan Mata Kuliah
    input mk5
                                : "
    input "SKS
    input sks5
    output "Teori atau Praktik [T/P/(TP)]:"
    input jns
do {
  if(jns== "T" || jns=="t"){
    output "Persentase Nilai Tugas:
    input persentgs5
    output "Nilai Tugas
    input nilaitgs5
    output "Persentase Nilai UTS : "
    input persenuts5
    output "Nilai UTS
    input nilaiuts5
    output "Persentase Nilai UAS : "
```

```
input persenuas5
  output "Nilai UAS
                             : "
  input nilaiuas5
}
else if(jns=="P" \parallel jns=="p"){
  output "Persentase Nilai Tugas:"
  input persentgs5
                             : "
  output "Nilai Tugas
  input nilaitgs5
  output "Persentase Nilai UTS : "
  input persenuts5
  output "Nilai UTS
  input nilaiuts5
  output "Persentase Nilai UAS : "
  input persenuas5
  output "Nilai UAS
                             : "
  input nilaiuas5
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs5
                                   : "
  output "Nilai Tugas Teori
  input nilaitgs5
  output "Persentase Nilai UTS Teori : "
  input persenuts5
  output "Nilai UTS Teori
  input nilaiuts5
  output "Persentase Nilai UAS Teori : "
  input persenuas5
```

```
input nilaiuas5
     output "Persentase Nilai Tugas Praktik:"
     input persentgs5
                                      : "
     output "Nilai Tugas Praktik
     input nilaitgs5
     output "Persentase Nilai UTS Praktik : "
     input persenuts5
     output "Nilai UTS Praktik
                                      :";
     input nilaiuts5
     output "Persentase Nilai UAS Praktik : "
     input persenuas5
                                      : "
     output "Nilai UAS Praktik
    input nilaiuas5
  }
  if(persentgs5+persenuts5+persenuas5!=100){
     output "Inputan salah, Persentase melebihi /kurang dari 100."
     output "Masukkan inputan ulang!"
  }
  } while(persentgs5+persenuts5+persenuas5!=100);
}
if (jmlhmk >= 6){
     output "Mata Kuliah Ke
                                      : 6"
     output "Masukkan Mata Kuliah
    input mk6
     input "SKS
                                : "
     input sks6
     output "Teori atau Praktik [T/P/(TP)]:"
```

: "

output "Nilai UAS Teori

```
input jns
```

```
do {
  if(jns== "T" || jns=="t"){
     output "Persentase Nilai Tugas:
    input persentgs6
    output "Nilai Tugas
    input nilaitgs6
     output "Persentase Nilai UTS : "
    input persenuts6
    output "Nilai UTS
    input nilaiuts6
    output "Persentase Nilai UAS : "
    input persenuas6
                               : "
     output "Nilai UAS
    input nilaiuas6
  }
  else if(jns=="P" || jns=="p"){
    output "Persentase Nilai Tugas:"
    input persentgs6
    output "Nilai Tugas
    input nilaitgs6
     output "Persentase Nilai UTS : "
    input persenuts6
    output "Nilai UTS
    input nilaiuts6
     output "Persentase Nilai UAS : "
     input persenuas6
```

```
: "
  output "Nilai UAS
  input nilaiuas6
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs6
                                  : "
  output "Nilai Tugas Teori
  input nilaitgs6
  output "Persentase Nilai UTS Teori : "
  input persenuts6
  output "Nilai UTS Teori
                                  : "
  input nilaiuts6
  output "Persentase Nilai UAS Teori : "
  input persenuas6
  output "Nilai UAS Teori
                                   : "
  input nilaiuas6
  output "Persentase Nilai Tugas Praktik:"
  input persentgs6
                                     : "
  output "Nilai Tugas Praktik
  input nilaitgs6
  output "Persentase Nilai UTS Praktik : "
  input persenuts6
                                    :";
  output "Nilai UTS Praktik
  input nilaiuts6
  output "Persentase Nilai UAS Praktik : "
  input persenuas6
  output "Nilai UAS Praktik
  input nilaiuas6
}
if(persentgs6+persenuts6+persenuas6!=100){
```

```
output "Inputan salah, Persentase melebihi /kurang dari 100."
       output "Masukkan inputan ulang!"
    }
     }while(persentgs6+persenuts6+persenuas6!=100);
  }
if (jmlhmk >= 7)
                                 : 7"
       output "Mata Kuliah Ke
       output "Masukkan Mata Kuliah
       input mk7
                                  : "
       input "SKS
       input sks7
       output "Teori atau Praktik [T/P/(TP)]:"
       input jns
  do {
    if(jns== "T" || jns=="t"){
       output "Persentase Nilai Tugas:
       input persentgs7
       output "Nilai Tugas
       input nilaitgs7
       output "Persentase Nilai UTS : "
       input persenuts7
       output "Nilai UTS
       input nilaiuts7
       output "Persentase Nilai UAS : "
       input persenuas7
       output "Nilai UAS
```

```
input nilaiuas7
}
else if(jns=="P" || jns=="p"){
  output "Persentase Nilai Tugas:"
  input persentgs7
                             : "
  output "Nilai Tugas
  input nilaitgs7
  output "Persentase Nilai UTS : "
  input persenuts7
                             : "
  output "Nilai UTS
  input nilaiuts7
  output "Persentase Nilai UAS : "
  input persenuas7
  output "Nilai UAS
                             : "
  input nilaiuas7
}
else{
  output "Persentase Nilai Tugas Teori: "
  input persentgs7
  output "Nilai Tugas Teori
                                   : "
  input nilaitgs7
  output "Persentase Nilai UTS Teori : "
  input persenuts7
  output "Nilai UTS Teori
  input nilaiuts7
  output "Persentase Nilai UAS Teori : "
```

input persenuas7

input nilaiuas7

output "Nilai UAS Teori

```
output "Persentase Nilai Tugas Praktik:"
      input persentgs7
                                       : "
      output "Nilai Tugas Praktik
      input nilaitgs7
      output "Persentase Nilai UTS Praktik : "
      input persenuts7
      output "Nilai UTS Praktik
                                       : ";
      input nilaiuts7
      output "Persentase Nilai UAS Praktik : "
      input persenuas7
      output "Nilai UAS Praktik
                                       : "
      input nilaiuas7
    }
    if(persentgs7+persenuts7+persenuas7!=100){
      output "Inputan salah, Persentase melebihi /kurang dari 100."
      output "Masukkan inputan ulang!"
    }
    }while(persentgs7+persenuts7+persenuas7!=100);
  }
      Output "
                   KARTU HASIL STUDI
      output " UNIVERSITAS DIAN NUSWANTORO
                         : ", nim
      output "NIM
      output "NAMA
                           : ", nama
      output "JUMLAH MATA KULIAH: ", jmlhmk
  Depend on (nim[0])
A:
Output "Fakultas Ilmu Komputer"
Depend on (nim[1])
1:
```

```
Output "Jenjang S1"
Depend on (nim[2])
1:
Output "Program Studi Teknik Informatika "
2:
Output "Program Studi Sistem Informasi"
4:
Output "Program Studi Desain Komunikasi Visual"
5:
Output "Program Studi Ilmu Komunikasi"
Default:
Output "Tidak ada "
2:
Jenjang D3
Depend on (nim[2])
1:
Output "Program Studi Teknik Informatika "
2:
Output "Program Studi Sistem Informasi"
Default:
Output "Tidak ada"
Depend on (nim[0])
B:
Output "Fakultas Ekonomi Dan Bisnis"
Depend on (nim[1])
1:
Output "Jenjang S1"
Depend on (nim[2])
1:
```

```
Output "Program Studi Manajemen"
2:
Output "Program Studi Akuntansi"
Default:
Output "Tidak Ada"
Depend on (nim[2])
2:
Output "Jenjang d3"
Depend on (nim[2])
1:
Output "Program Studi Manajemen"
Output "Program Studi Akuntansi"
Default:
Output "Tidak Ada"
       Output "Mata Kuliah : ", mk1
       Output "Jumlah SKS
                                  : ", sks1
((nilaitgs1*persentgs1/100)+(nilaiuts1*persenuts1/100)+(nilaiuas1*persenuas1/100));
    if(jn1 > = 85){
       pred1 = "A";
     }
    else if(jn1 > = 80 \parallel jn1 < 85){
       pred1 = "AB";
     }
    else if(jn1 > = 75 \parallel jn1 < 80){
       pred1 = "B";
     }
    else if(jn1 > = 70 \parallel jn1 < 75){
```

```
pred1 = "BC";
     }
     else if(jn1 > = 65 \parallel jn1 < 70){
       pred1 = "C";
     }
     else if(jn1 > = 60 \parallel jn1 < 65){
       pred1 = "D";
     }
     else {
       pred1="E";
     }
       ouput "Score
                       :", jn1
       output "Predikat : ", pred1
  if(jmlhmk >= 2)
       Output "Mata Kuliah : ", mk2
                                : ", sks2
       Output "Jumlah SKS
  jn2 = ((nilaitgs2*persentgs2/100)+
(nilaiuts2*persenuts2/100)+(nilaiuas2*persenuas2/100));
     if(jn2 > = 85){
       pred2 = "A";
     }
     else if(jn2 >= 80 \parallel jn2 < 85){
       pred2 = "AB";
     }
     else if(jn2 > = 75 \parallel jn2 < 80){
       pred2 = "B";
     else if(jn2 > = 70 \parallel jn2 < 75){
       pred2 = "BC";
```

```
}
     else if(jn2=65 \parallel jn2 < 70){
       pred2 = "C";
     }
     else if(jn2 >= 60 \parallel jn2 < 65){
       pred2 = "D";
     }
     else {
       pred2="E";
     }
       ouput "Score
                        : " , jn2
       output "Predikat : ", pred2
  }
  if (jmlhmk >= 3) {
       Output "Mata Kuliah
                                : ", mk3
       Output "Jumlah SKS
                                    : ", sks3
  jn3 = ((nilaitgs3*persentgs3/100)+
(nilaiuts3*persenuts3/100)+(nilaiuas3*persenuas3/100));
     if(jn3 > = 85){
       pred3 = "A";
     }
     else if(jn3 >= 80 \parallel jn3 < 85){
       pred3 = "AB";
     }
     else if(jn3 > = 75 \parallel jn3 < 80){
       pred3 = "B";
     else if(jn3 > = 70 \parallel jn3 < 75){
       pred3 = "BC";
```

```
}
     else if(jn3 > = 65 \parallel jn3 < 70){
       pred3 = "C";
     }
     else if(jn3 > = 60 \parallel jn3 < 65){
       pred3 = "D";
     }
     else {
       pred3="E";
     }
       ouput "Score
                        : " , jn3
       output "Predikat : ", pred3
  }
  if (jmlhmk >= 4){
       Output "Mata Kuliah
                                : ", mk4
       Output "Jumlah SKS
                                    : ", sks4
  jn4 = ((nilaitgs4*persentgs4/100)+
(nilaiuts4*persenuts4/100)+(nilaiuas4*persenuas4/100));
     if(jn4>=85){
       pred4 = "A";
     }
     else if(jn4 >= 80 \parallel jn4 < 85){
       pred4 = "AB";
     }
     else if(jn4 > = 75 \parallel jn4 < 80){
       pred4 = "B";
     else if(jn4 >= 70 \parallel jn4 < 75){
       pred4 = "BC";
```

```
}
     else if(jn4 >= 65 \parallel jn4 < 70){
       pred4 = "C";
     }
     else if(jn4 >= 60 \parallel jn4 < 65){
       pred4 = "D";
     }
     else {
       pred4="E";
     }
       ouput "Score
                        : " , jn4
       output "Predikat : ", pred4
  }
  if (jmlhmk >= 5) {
       Output "Mata Kuliah
                                : ", mk5
       Output "Jumlah SKS
                                    : ", sks5
  jn5 = ((nilaitgs5*persentgs5/100)+
(nilaiuts5*persenuts5/100)+(nilaiuas5*persenuas5/100));
     if(jn5 > = 85){
       pred5 = "A";
     }
     else if(jn5 >= 80 \parallel jn5 < 85){
       pred5 = "AB";
     }
     else if(jn5 > = 75 \parallel jn5 < 80){
       pred5 = "B";
     else if(jn5 >= 70 \parallel jn5 < 75){
       pred5 = "BC";
```

```
}
     else if(jn5 >= 65 \parallel jn5 < 75){
       pred5 = "C";
     }
     else if(jn5 > = 60 \parallel jn5 < 65){
       pred5 = "D";
     }
     else {
       pred5 ="E";
     }
       ouput "Score
                        : " , jn5
       output "Predikat : ", pred5
  }
  if (jmlhmk >= 6) {
        Output "Mata Kuliah
                                 : ", mk6
                                    : ", sks6
       Output "Jumlah SKS
  jn6 = ((nilaitgs6*persentgs6/100)+
(nilaiuts6*persenuts6/100)+(nilaiuas6*persenuas6/100));
     if(jn6 > = 85){
       pred6 = "A";
     }
     else if(jn6 >= 80 \parallel jn6 < 85){
       pred6 = "AB";
     }
     else if(jn6 > = 75 \parallel jn6 < 80){
       pred6 = "B";
     else if(jn6 >= 70 \parallel jn6 < 75){
       pred6 = "BC";
```

```
}
     else if(jn6 >= 65 \parallel jn6 < 70){
       pred6 = "C";
     }
     else if(jn6 >= 60 \parallel jn6 < 65){
       pred6 = "D";
     }
     else {
       pred6 ="E";
     }
       ouput "Score
                        :", jn6
       output "Predikat : ", pred6
  }
  if (jmlhmk >= 7){
       Output "Mata Kuliah
                                : ", mk7
                                    : ", sks7
       Output "Jumlah SKS
  jn7 = ((nilaitgs7*persentgs7/100)+
(nilaiuts7*persenuts7/100)+(nilaiuas7*persenuas7/100));
     if(jn7 > = 85){
       pred7 = "A";
     }
     else if(jn7 >= 80 \parallel jn7 < 85){
       pred7 = "AB";
     }
     else if(jn7 > = 75 \parallel jn7 < 80){
       pred7 = "B";
     else if(jn7 > = 70 \parallel jn7 < 75){
       pred7 = "BC";
```

```
}
  else if(jn7>=65 || jn7<70){
    pred7 = "C";
  }
  else if(jn7>=60 || jn7<65){
    pred7 = "D";
  }
  else {
    pred7 ="E";
  }
    ouput "Score
                  :", jn7
    output "Predikat : ", pred7
}
    ip1 = (jn1+jn2+jn3+jn4+jn5+jn6+jn7) / jmlhmk
    ouput "IP Semester : ", ip1
```