Bio-auth-process (Person P)

{

P.IDFP ← getFingerPrint(P)

P.IDIR ← getIris(P)

P.IDFA ← getFace(P)

P.IDFP ← feature\_extract (P.IDFP)

P.IDIR ← feature\_extract (P.IDIR)

P.IDFA ← feature\_extract (P.IDFA)

for (i-0;i< dbtemplateFinger.length;i++)

{

Check(dbtemplateFinger(i))

If (dbtemplateFinger(i)) ← P.IDFP)

{

Q.feat ← feature\_extract(dbtemplateFinger(i))

If (AFSASVM matcher(Q) ← P.IDFP)

P.IDFP belongs to user Q

Set P.IDFP\_status←1}

else

set P.IDFP\_status←0 // P has failed fingerprint authentication

}

for (j=0;j< dbtemplateIris.length;j++)

{

Check(dbtemplateIris(j))

If (dbtemplateIris(j)) ← P.IDIR)

{

Q.feat ← feature\_extract(dbtemplateIris(j))

If (AFSASVM matcher(Q) ← P.IDIR)

set P.IDIR\_status←1

P.IDIR belongs to user Q

}

else

set P.IDIR\_status←0 // P has failed iris authentication

}

If ((P.IDFP\_status←1) AND (P.IDIR\_status←1))

{

P has passed multimodal authentication

return}

else If ((P.IDFP\_status←0) AND (P.IDIR\_status←0))

{

P has failed multimodal authentication

exit}

else

If (P.IDFP\_status←1) OR (P.IDIR\_status←1)

{

for (k=0;k< dbtemplateFace.length;k++)

{

Check(dbtemplateIFace(k))

If (dbtemplateFace(k)) ← P.IDFA)

{

Q.feat ← feature\_extract(dbtemplateFace(k))

If (AFSASVM matcher(Q) ← P.IDFA)

set P.IDFA\_status←1

P.IDFA belongs to user Q

P has passed multimodal authentication

return

}

else {

set P.IDFA\_status←0

exit // P has failed face and multimodal authentication }

}

}