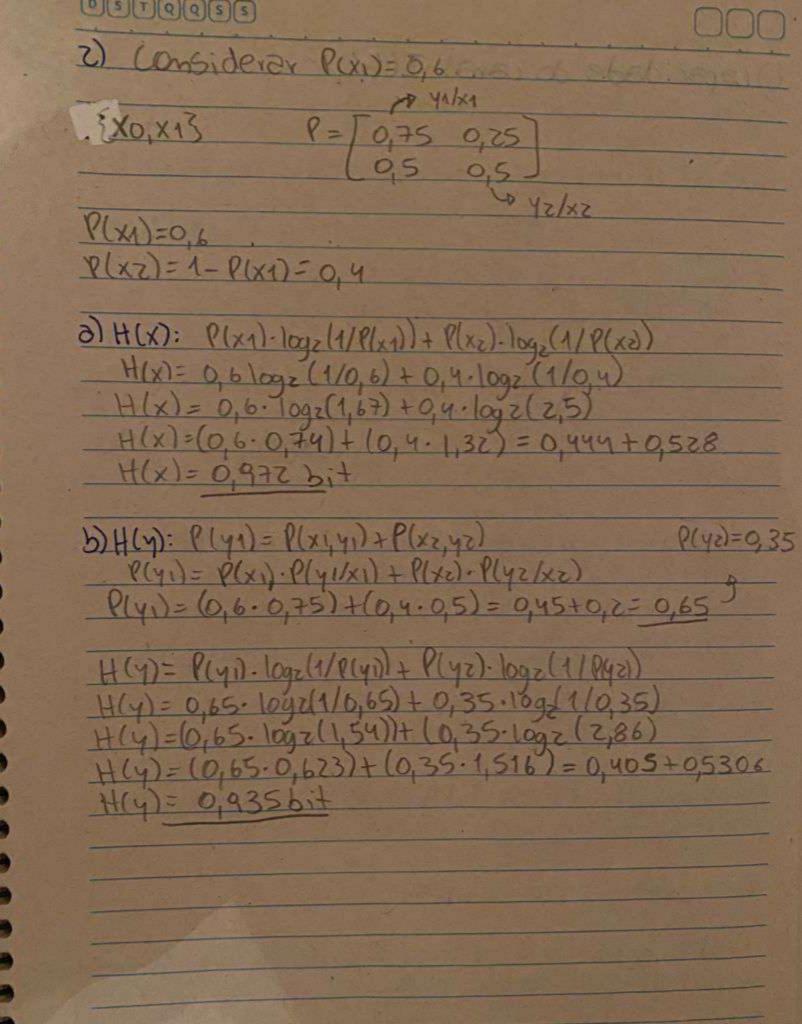
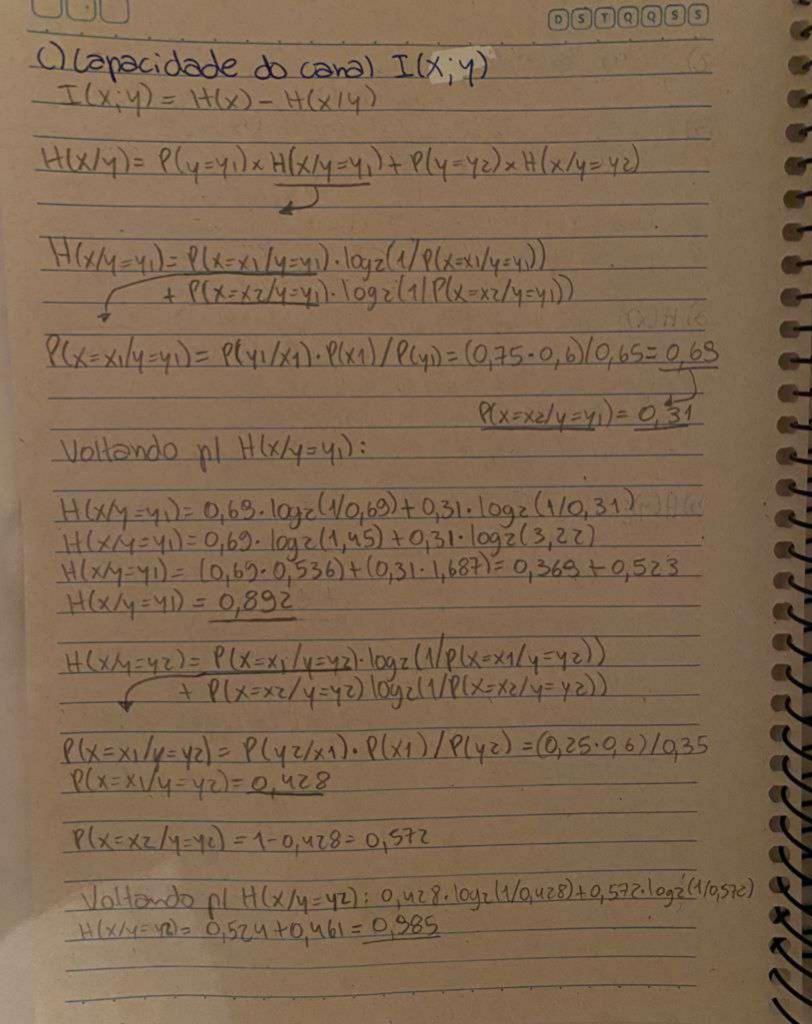


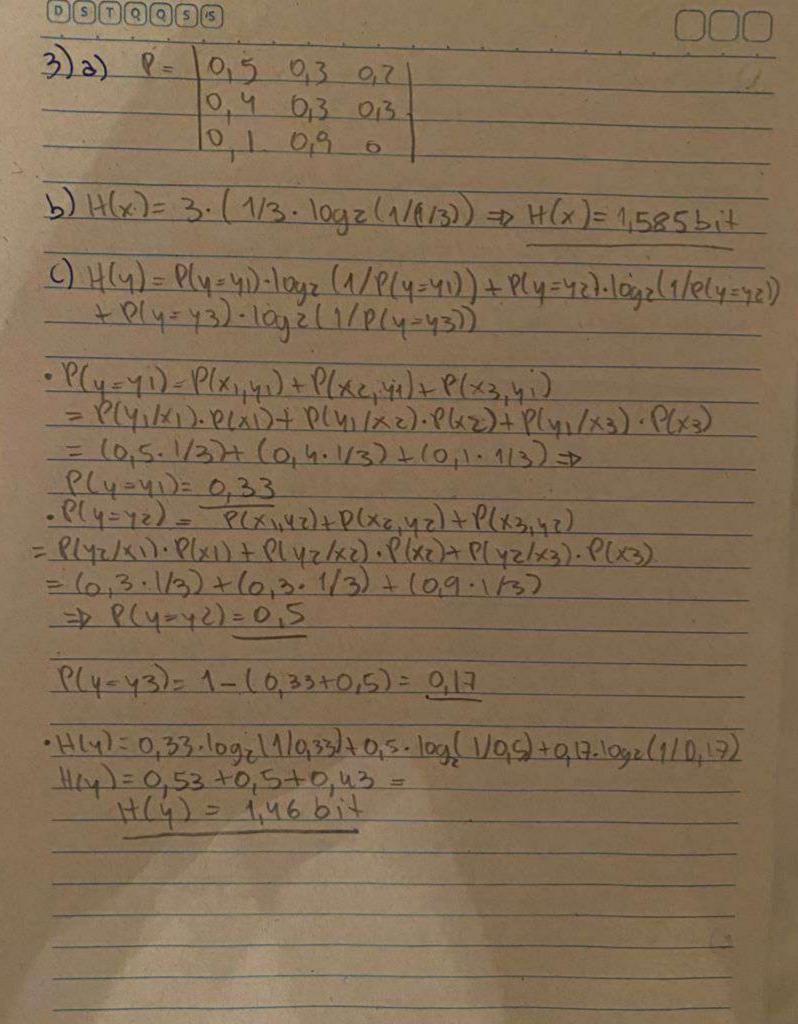
5 (T)(Q)(Q)(S d) I (x;4): I(x, y) = H(x) - H(x,y) H(X/4) = P(y=y1). H(X/y=y1) + P(y=y2). H(X/y=42) + P(y=43). H(X/4=43) (x/y=y1)= P(x=x1/y=y1). logz (1/P(x=x1/y=y1)) +P(x=x2/y=y1). logz (1/P(x=x2/y=y1)) P(x=x1/y=41)= P(41/x1).P(x1) P(41/x2).P(XZ) 0,8.05 =0,95 = 0,05.0,5 = 0,05 0,42 Voltando pit(x/y=yi): H(x4=41) = 0,95. logz (1/0,95) + 0,05. logz 0-015,0+ FAO,0 H(X/4=41)=0,283 H(X/4=42)= P(X=X1/4=42).log2(1/P(X=X1/4=42)) +P(x=xz/y=yz).logz(1/P(x=xz/y=yz)) P(42/x2). P(x2)=1-05=0,5 P(42/X1)-P(X1) =0,15.0,5/0,15=0,5

```
DSTQQSS
H(x/y=yz)=0,5 logz (1/0,5)+0,5.logz (1/0,5)
H(xM=yz)=0,5+0,5=1
 H(XM=43)=P(x=X1/4=43).logz(1/P(x=X1/4=43))
+P(x=x2/y=43).logz(1/P(x=x2/4=43))
                        = P(43/x2). P(x2)
P(43)
= ((43/x1).p(x1)
   P(43)
                       = 1-0,058 = 0,942
= 0.05.0,5-0,058
   0,43
 H(x/4=43)=0,058.logz(1/0,058)+0,942.logz(1/0,942)
=(0,058.4,107)+(0,942.0,804)
   = 0,738 + 0,757 = 0,995
  H(x/y)=(0,42-0,283)+(1.0,5)+(0,995.0,43)
  H(XM)= 1
   I(x;y)=H(x)-H(xM)
   I(x;y)=1-1=0
```





DSTQQSS Yorkando pl H(X/4): H(X/M) = (0,65.0,892) + (0,35.0,385) H(XM)= 0,924 Portanto: I(x/y) = H(x) - H(x/y) I(xM)= 0,972-0,924 I(xM)= 0,048)



DSTQQSS d) H(y/x) = P(x=x1). H(y/x=x1)+P(x=x2). H(y/x=x2) + P(x=x3). H(y/x=x3) H(y/x=x1)=P(y=y1/x=x1).logz(1/P(y=y1/x=x1)) +P(y=y2/x=x1).logz(1/P(y=y2/x=x1)) +P(y-y3/x=x1)'logz(1/P(y=y3/x=x1)). H(4/x=x1)=0,5 logz(1/95)+0,3 logz(1/93)+92 logz(1/92)
H(4/x=x1)=1,48bit ·H(4/x=xz)=P(y=y1/x=xz).logz(1/P(y=y1/x=xz)) + P(y=yz/x=xz). logz(1/P(y=yz/x=xz)) + P(y=yz/x=xz). logz(1/P(y=yz/x=xz)) H(y/x=xz)=0,4.10g2(1/0,4)+(93.10y281/0,3)).2 H(y/x=xz)= 157614 · H(y/x=x3)=P(y=y1/x=x3).logz(1/P(y=y1/x=x3)) +P(y=y2/x=x3).logz(1/P(P=y2/x=x3)) + P(y=y3/x=x3). Tay2(1/P(P=y3/x=x3)) H(y/x=x3)=0,1.logz(1/q1)+0,9.logz(1/0,9)+0 H(y/x=x3)=0,47bit H(4/x)= (1/3.1,48) + (1/3.1,57)+(1/3.0,47) H(Y/X) = 1,173 bit e) I(x,y)= H(y)-H(y/x)=1,46-1,173 +id F85,0 = (4:X) I