



if ([EXIMEM. Regarite c s1) and (EXIMEM. Rd == ID/EX.Rs) and LEXIMEM. Rd : (0)) Forward Aclo; iP ((M/WB. Rigarite s=1) and (M/WB Rd = = ID/Ex. Rs) and) (M/WB.Rd ! c D); and 10, Forward As DI;

```
module Hazzard (input [4:0] RtIDEX, Rs, Rt, input mem read IDEX, init, IFID flush Temp, output reg PCwrite, IFIDwrite, Controller Flush, IFID flush);
                always@(mem read IDEX, RtIDEX, IFID flush Temp, init) begin
                        PCwrite = 1'bl;
                        IFIDwrite = 1'bl:
                        Controller Flush = 1'b0;
                        IFID flush = 1'b0;
                        if (init == 1'b1)
                                 begin PCwrite <= 1'b1; IFIDwrite <= 1'b1; Controller_Flush <= 1'b0; IFID flush <= 1'b0; end</pre>
                        else if (mem read IDEX == 1'bl && (RtIDEX == Rs || RtIDEX == Rt))
                                 begin PCwrite <= 1'b0; IFIDwrite <= 1'b0; Controller Flush <= 1'b1;</pre>
                                         if (IFID flush Temp == 1'b1)
                                                  IFID flush <= 1'bl;</pre>
                                         else
                                                  IFID flush <= 1'b0;</pre>
15
                                  end
16
                        else
17
                                 begin PCwrite <= 1'b1; IFIDwrite <= 1'b1; Controller Flush <= 1'b0;</pre>
                                         if (IFID flush Temp == 1'bl)
                                                  IFID flush <= 1'b1;</pre>
                                         else
                                                  IFID flush <= 1'b0;</pre>
                                 end
                        end
       endmodule
```

(indento Loop : SIth, Ryo/ 839720 200 50 (1) (40 ; (++) beg Ryo, Ro, End_Loop if (max<nam(i) W R471000 (R29) max=nami?i) 51+ R119 R11R4 index= i SW RA12000 (Ro) Taddi RyRA16 SW R2912004(R0) Newi: addi R299 R2917 JLoop End Loop; ...

| ₽ | Msgs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------|---|--|---|---|---|---|---|-------------------|---|--|-----------|---|--------------|--------------|---|--------------|-------------------------------|--|-----------------------|--|---|--|---|---------------|--|--|---------------------------------------|--|--|--|
| ↓ /TB/UUT/ourdp/dk : | 1 | | aradpaaranaand | anaaaaaaad | nonnaphonon | | ndranananada | unnanandpuuna | COOLIACOOL | ronorjanovanov | udaaaaaaad | | donomond | | | | | | | | nonnonnoh | | AMMAMAM | | | document. | udaaaaaaaa | donoma | | donomono | |
| /TB/UUT/ourdp/init | 0 | | | | | | \perp | | | | | | | | | | | | | | | | | | | | | | | | ļ. |
| <pre>/TB/UUT/ourdp/reg_dstI</pre> | 0 | | 414 | | | Щ | ∱ | | ДЛ. | | \downarrow | ╌ | <u> </u> | \Box | | | | $oxed{oxed}$ | | | | \Box | $\perp \Lambda$ | | Γ | ↓ | ٦ | ┸┸ | | Л | <u> </u> |
| √TB/UUT/ourdp/r31I () | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | <u> </u> |
| /TB/UUT/ourdp/reg_writeI | 0 | | | للساتا | TUU | | which | | ┅╙ | | | | اسما | $\Box\Box$ | | | | | | | | | | | MJ | | T | புபு | LLL | | Λ |
| /TB/UUT/ourdp/alu_srcI (| 0 | | لسحيك | ЩЩ | whr | | ıtılı | | TŲ. | تحمالس | | السآب | mri | | | | lī — Ш | | | | TUL | | | | ĺΠΙ | | | \coprod | | باسلا | <u>η</u> |
| /TB/UUT/ourdp/mem_readI (| 0 | <u> </u> | | | | | Λ | | —/∟ | | | | <u>↓</u> | | | _ | / | μ | | | | | | | Л | الــــــــــــــــــــــــــــــــــــ | | ₩ | ╨ | <u> </u> | ļ <mark>.</mark> |
| /TB/UUT/ourdp/mem_writeI | 0 | ــــــــــــــــــــــــــــــــــــــ | | | ЛЩ | | \perp \perp \perp | | | Л— | $+$ \Box + | | | ГЦ | | | | | | | | | | | | ├ | ╨┖ | | Л | ┸┸ | . |
| / /TB/UUT/ourdp/mem_to_regI | 0 | | _ | | | | І —— | | | | | | ╀ | | | | ∤└── | igwdaps | | | ——┞ | | | | | ┼)└ | | μ \sqsubseteq | + | | |
| /TB/UUT/ourdp/write_pc_4I (| 0 | | | | | | + | | | | + | | | _ | | | | | | 0 0 | | | | | | | _ | <u> </u> | | | |
| /TB/UUT/ourdp/branchI | 0 | | | | ╙╫┖ | | + | _ _ _ | _ _ | ΨЦ | ┦┖━┤ | الاال | — —Ц | | | | | oxdot | JL | | — Ц | | | | ШL | ╨┸ | ₩ـــ | μ \square | μІ | $\sqcup \sqcup$ | ╀┦┦┞ |
| /TB/UUT/ourdp/adr_r31I | 0 | | | | | | + | | | | + | | | | | | | | | | | | | | | _ | + | - | | | |
| /TB/UUT/ourdp/jumpI (| 0 | | | | | | | | | | | | | 2000000 | 10-00 | 100000000 | 0000000 | | 2000000 | | | | | | | | | | | | 2000 |
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| — y · · · · · · · | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| /TB/UUT/ourdp/RegA_data | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB/UUT/ourdp/RegB_data | 0 | ()(0)()(0) | ينفضن المنا | ن استنان | | نصنصت نننت | والمتنافق | | | | ونستسندن | | حنصن | | نسنسن | نصنصن | | نصنفت | | ينتصف | منصنص | | _ | _ | _ | | | _ | | | |
| TB/UUT/ourdp/wdata1 | 0 | 000000000000000000000000000000000000000 | | 00000000000 | _,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | | | | 00000 | | | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 00000 | | | | | | | | |
| TB/UUT/ourdp/wdata | 0 | 00000000000 | | | _0000000 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | 00000 | | | | | | | | | | | 10000000 | | | | | 00000000 | | | | , o |
| TB/UUT/ourdp/ALU_Res | 0 | | _YY_YYY\\ | //_///_/////////////////////////////// | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | or come to our | | nonnan na n | num nonoro un | | annorman a | | | | | | | ր_ոստու_ու | WYYYY | | __\\\\\\ | VYYYYY YY | YYY#_YYY | | | | | | ייייי |
| TB/UUT/ourdp/data_exten | 0 | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Y_YYYYYY_Y | | | | | | | | | الكاكاتناكات | | | اكتناكنكا | | | W-W-W- | 7.777777 | ~~~~~~ | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | ***** | _/_///////_/ | /_///_/// | | | XV_XX) |
| TB/UUT/ourdp/data_exten | 0 | VVVVVVVVVV | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Y YYYYYYY Y | YYYYYYY | YYYYYY | | 7777777777 | _/_YYYYY_Y/ | ייירירייי | 10000000 | V VYYYY | ****** | **** | W/_/_//// | W_YY_YY_Y | YYYYYYY | 7777777 | mnm | Y YYYYY | VYYYYY | YYYYY YY Y | WYYYYY | **** | V_YYYYY_Y | ******* | **** | W - WWW | W_/// |
| | 0 | | W. W. A. A. W. A. W. | /// ////////////////////////////////// | www.w.w.w. | 7 V V | YY O | 7, VV V | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | // n | | — r | W-0 | // V/ | ***** | YY O | W-W-W-W-W | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 77.U | W-W-W | 7 7 7 7 7 Y | N- AAA AA | VVVV-VV-V | W-A-AAAA | W-VV-VVV | YYU | / // / // / / / / / / / / / / / / / / | NWW-W-W | y x xxxxx | VI VVI V |
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| TB/UUT/ourdp/B_ALU1 T= | 20 | | | | | | | ,, ,,,, , ,,,,,,,, }}```` | | | | | 1000-0-0 | | مستنست | | | | | | | | | | | | | | | | |
| T=\(\frac{1}{1}\)/001/Jourdp/A ALU | 20 | -(0))(0 | | ⋏⋏ ⋰ ⋏⋏⋰⋏⋏⋏⋪⋉⋰ ⋎⋎⋰⋎⋎⋰⋰⋎⋰ | ₩₩₩₩₩₩₩₩₩₩ | | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | ⋏⋏ _─ ⋏⋏⋏₩ <u></u> ─⋫⋏⋏⋏⋏ ⋎⋎──⋎──⋎ [─] ─⋎ | | | | | 4000000000 | | | | 1000000 | | | ⋏_⋏⋏⋏⋪⋏∟⋏⋏ ⋎──⋎──⋎ | ₩₩₩₩₩₩ ₩₩₩₩₩₩ | ~~~~~~~~ | _^^ | ************************************** | ₩₩ • | ************************************** | \ \ | ΛΛ.ΑΑΑ₩ ΥΥΥ'''Υ'''Υ''' | \#\._\\ \#_\\\\\\\\\\\\\\\\\\\\\\\\\ |) | |
| +-4 /TB/UUT/ourdp/RegA_dataO 2 | 20 | | | ΛΛ_ΛΛΛΛ ΥΥ ⁻ ΥΥ ⁻ Υ ⁻ Υ | -^^-^__\\ -_\\\\\\\\\\\\\\\\\\\\\ | _/_///_/// | ************************************** | ΛΛ | مصبحت | | | | فصيمصيت | | | | _^ | | | ΛΛΛ ΥΥΥ | ____\ Y_YY_YY_Y | | - | -W-W-W- | V V VV | - | | γιν <u>γ</u> γ γ γ γ | -WWW | | |
| +-4 /TB/UUT/ourdp/RegB_dataO | 1 | | XXX X X XX | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| +-4 /TB/UUT/ourdp/Mem DataO (| 0 | -(0 XX0 | 7),0 | | |)) o | VV V VVVV V | 717 O | | | _/_/////////////////////////////////// | | |)) 0 | _^ | ضفضف | YY 0 | | | ,_,,_,,,,)) () | ونضنضن | })``O | _^ | **** | W_V_V | A_A_AA_AA | 110 | V/_V/_ | | XXO | 100 |
| +- /TB/UUT/ourdp/ALU ResO | 0 | | mim | YYY-YY-YYYYY | | | 747777 777747 | 77 77777 7777 | | | 11117 TYYYYY | | | | | | 74444 | ***************************** | Y-YYYYY- | | | | Y-YY-YYYYY | 7979797 79 | 777777 | 1917-17 | // · · · · · · · · · · · · · · · · · · | 777777 | | | Yo > |
| +- /TB/UUT/ourdp/data exten 2 | 20 | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | _\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | | و خونجونجون بد | 7Y-7YY-Y-1YYYY -Ax-Axaay-xaa | فينطبنه فيجفر | جفرجفن بنبنج | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | والمنطوعية والمناط | _ | فبخبجف | فنجفنه | | فينجفون | _ | بجنبضيجن | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 744444. | | | | | | | | |
| +-4 /TB/UUT/ourdp/RegB_dataO2 (| 0 | —())(o)))))(| | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | Annumnn-ni | | | | | ACCRETACH | | | ייייייייייייייייייייייייייייייייייייי | | | | | | | | | | |
| TE/UUT/ourdp/ALU ResO2 | 0 | بجنبنبت ججبنبي | | جزب جنبندينجينجين | فيتصينين هيتجينجنب | فيتصرفون فعندها | بة مينينين نصيفي في | بترنينيك ترجيبتينسينيك | تجربنيك نجندين | المرابات بارابية فرابات | والمتحدث والمتحدث والمتحدث | | بصنينصينجين | _ | فيجرفونها | الراجية بالبارات | بتبطيعين | منصبصب | | فعرب والمناوات | و خصرتها بساوتها | | الجروابات والمراجعة | الإنصارات | | بنصبنجنب ن | فيجار باران والم | بنجيب نبضينت د | سينيندين بالمراجعين فا | بباراران والمراجعة | |
| +-4 /TB/UUT/ourdp/RegB_dataO3 (| 0 | | 0)) (1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| TH- /TB/UUT/ourdp/PCbeq | 3 | | | - | | | - | | _ | | | | | _ | - | | | | | - | - | | _ | - | | | - | - | | | |
| TH- /TB/UUT/ourdp/PC1I | 3 | 00000 000000000000000000000000000000000 | | | mmim | mahama | n mmm | | מכומימו | 000000000000000000000000000000000000000 | | XX -XXX | 011111111111111111111111111111111111111 | 111111111111 | mm m | 111111111111111111111111111111111111111 | מיניניני בינ | | 0000000 | 000 0000 | 0000000 | 2222222 | MM - 1 | 777777777 | | MINIMI I | damm | | domini | hmm | 10 111111111 |
| TH- /TB/UUT/ourdp/PC1 | 2 | 000000000000000000000000000000000000000 | | | mmim | mmhmmm | n-mmm | | מרמממנו | 000000000000000000000000000000000000000 | |)))) | 011111111111111111111111111111111111111 | 1717377373 | mmm | 111111111111111111111111111111111111111 | מיניניני בינ | | 0000000 |)))) | | 22222222 |)))))) | 0000000 | | 1011111111 | mmm | ממר מממנו | 000000000000000000000000000000000000000 | himin | |
| TE/UUT/ourdp/PC10 | 1 | -00000 | |)))))))))))))))) | 000000000000000000000000000000000000000 | | | mm nimm | | 000000000000000000000000000000000000000 | |))))))) | 000000000000000000000000000000000000000 | 7000000 | | 11111111111111111 | (CCCCC TCCC | 0000000 | mmm |))))) •))) | 0000000h | - 2000000 | | 31111111111 |))))))) | mmm | | | | | |
| TB/UUT/ourdp/PC1O2 | 15 | -00000000000000000000000000000000000000 | | 000000000000000000000000000000000000000 | 000000000000000000000000000000000000000 | | 1)10 (1)1111111 | mm im | 0000000 |))))))))) | n mmn |))))))) | 000000000000000000000000000000000000000 | |))))))))))) | 0000000 | | 00000000 | mm | mm m | 0000000 | mm |))))))))) | ****** |)))))) | mmm | 0 000000 | mm | 000000000000000000000000000000000000000 | | |
| TB/UUT/ourdp/PC1O3 | 14 | -00000000000000000000000000000000000000 |)))))))) | mmm | mmm | namm | momm | mm mm | mmm | omboom | 0000000 | mm | mmmi |)) | 000000 | 2222222 | 1000 DOX | mmm |))))))))) | 99999-99 |)))))))))) | n mm |))))))))) | (((((((((((((((((((((((((((((((((((((((|)))) . | mmi | nomm | donom y | mmm | 1000000 | |
| TP A III II lourda ladroca | n | _\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | YY\$YY-Y-YYYYY | _\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | VVVV VV VVV | Y-VVVVVY-VY-V | ** *********************************** | Y-VVY-V-VVVVY | 77-787-7-1 | <i>γγγγ</i> γγγγγγ | V-VVVVVV-VV | VVV V VVV | <u> </u> | v vvvvv | VV-VVV-V-V | ***** | ha a anna | <u> </u> | vwww.vv | VVV V VVV | ,,,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | V VVVVVV | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | YYYYY YY Y | W V VVW | wyyyw | <u> </u> | V-VV-V-V | <u> </u> | V-VVVVV | |
| △ 🕶 ④ Now | 6806 ps | OS | 500 ps | | 1000 ps | | 1500 ps | | 2000 ps | | 2500 ps | | 3000 |) ps | | 3500 ps | | 4000 |) ps | | 4500 ps | | 5000 | 0 ps | | 5500 ps | S | 60 | 00 ps | | 6500 ps |
| ⊕ Cursor 1 | 6430 ps | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 64 | 30 ps |

| 1023 | 0 | 0 | 0 | 0 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 |
|------------|---|----|---|---|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|
| 1002 | 3 | 2 | 1 | ō | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ō | ō | ó | ō | ō | ō |
| 981 | 0 | 19 | 0 | 0 | 0 | 20 | 0 | Ō | ō | ō | ō | 0 | 0 | ō | 0 | ō | 0 | 0 | ō | ō | 0 |
| 960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 939 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 918 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 876 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 855 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 834 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 813 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 792 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 771 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 729 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 708 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 687 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 666 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 561 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 540 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 519 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 498 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 477 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 456 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 435 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 414 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 393 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 372 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 351 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 309 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 288 267 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 183 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 162 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 141 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 99 | 0 | 0 | 0 | 0 | Ö | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Ö | 0 | ō | 0 |
| 78 | 0 | 0 | 0 | 0 | ō | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57 | 0 | 0 | 0 | 0 | ō | 0 | 0 | 0 | 0 | 0 | 0 | ō | 0 | 0 | Ö | 0 | Ö | ō | 0 | 0 | 0 |
| 36 | 0 | 0 | 0 | 0 | ő | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ō | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | Ö | 0 | 0 | ő | Ö | 0 | Ö | Ö | ō | ō | Ö | 0 | Ö | Ö | Ö | ~ | • | | - | |
| -6 | • | | · | ŭ | | • | | | • | | · | • | • | • | • | | | | | | |
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