

TDTS08: Lab Report

Lab 2: Instruction Pipelining

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1 Introduction

2 Pipeline basics I

IMPLEMENT PICTURE DURING TEATIME

3 Pipeline basics II

When we have a short pipeline we get less time penalty due to that its only one step that needs redoing and therefore its detected earlier.

IMPLEMENT PICTURE DURING TEATIME

4 Branch prediction

Here we analyze how different branch prediction algorithms perform.

4.1 Description

For each predictor a benchmark was run according to the following command

```
sim-outorder -bpred predictor ~/TDTs08/bin/go.ss 3 8
```

4.2 Solution

The performance result can be seen in figure 1 below.



Figure 1 – Performance of the different branch prediction algorithms